Profile of the British Columbia High Technology Sector: 2014 Edition

PREPARED FOR THE MINISTRY OF TECHNOLOGY, INNOVATION AND CITIZENS' SERVICES
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BCStats

Authors: Dan Schrier, Lillian Hallin

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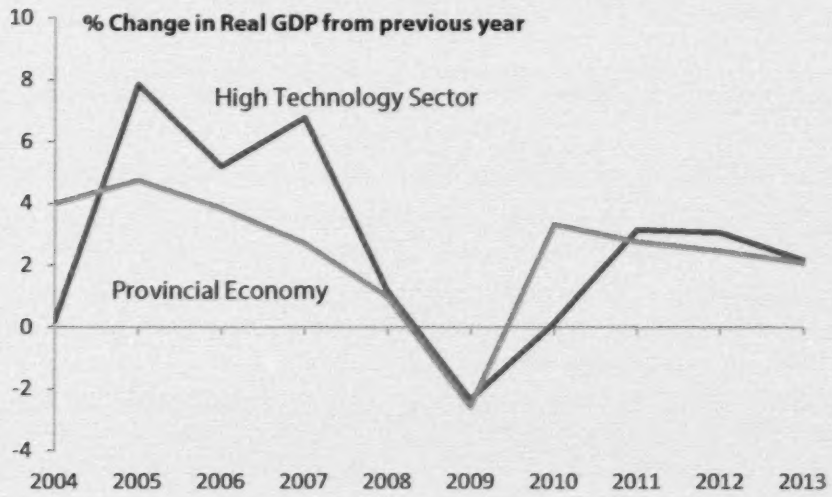
1. Executive Summary

The high technology sector is a vital part of the B.C. economy. The recognition of the importance of the sector to the province is reflected in its incorporation into the B.C. government's Jobs Plan. High technology firms tend to be innovative and efficient, creating goods and services that confer benefits on other parts of the economy by improving productivity and profitability, while at the same time providing relatively high-wage employment. The tech sector in British Columbia is still relatively small, but the province is home to high tech clusters in areas such as digital media and biotechnology that are among the best in the world.

1.1. B.C.'s high technology sector continued to grow in 2013

There was a 2.2% increase in the GDP of British Columbia's high technology sector in 2013 (note that GDP data are constant dollar figures, whereas all other indicators are unadjusted for inflation). In the manufacturing sector, high tech GDP experienced robust growth of 8.8%, to almost $1.6 billion. The service sector saw much slower growth, expanding 1.4% to around $11.6 billion.

B.C.'S HIGH TECH SECTOR USUALLY OUTPERFORMS THE OVERALL ECONOMY



Growth in high tech GDP is generally higher than that of the overall economy

Over the last decade, GDP in the high tech sector has grown faster than that of the industrial aggregate in all but two years (2004 and 2010). In 2013, high technology accounted for approximately 6.5% of British Columbia's overall economic output.[1]

Revenues in British Columbia's high technology sector also increased in 2013, climbing 5.2%, to $23.3 billion. All industry groups experienced revenue growth, with software publishing (+14.4%) and the manufacturing sector (+11.1%) leading the way.

1.2. High tech employment and wages continued to rise

Employment in British Columbia's high technology sector continued to climb in 2013, rising 1.4% to 86,800. The telecommunications sector struggled with respect to employment; however, a 16.4% boost in engineering employment more than offset a 14.2% drop in telecommunications jobs. Overall, the high technology sector employed approximately 4.4% of British Columbia's work force in 2013, more than the mining, oil and gas, and forestry sectors combined.

Along with employment, aggregate wages and salaries in British Columbia's high tech sector also continued to rise, climbing 1.7% in 2013, to almost $6.3 billion, the highest level ever recorded. At $1,390, average weekly earnings in the high tech sector are far higher than the overall B.C. average weekly wage rate of $870.

In 2013, there was a net addition of 728 high tech businesses in B.C., a growth of 8.1% over the previous year. In total, there were 9,738 high tech businesses with employees in the province in 2013. About 92% of these businesses were in service sector industries.

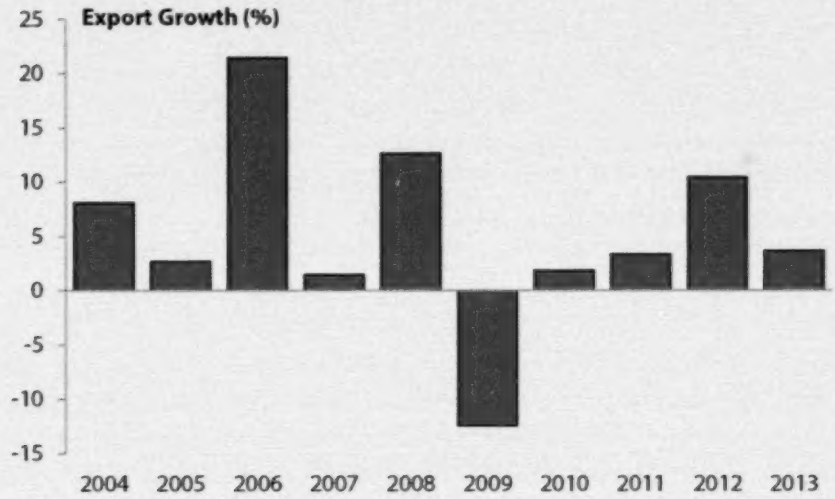
1.3. Exports and imports of high tech goods grew in 2013

In 2013, the value of British Columbia high technology goods exports climbed 3.7%, to over $1 billion, the first time this milestone has been reached. However, the growth was lower than that of total provincial commodity exports, which jumped 6.2%, such that

[1] This percentage is calculated using current dollar GDP estimates, since the constant dollar value of the B.C. industrial aggregate is chained and chained data are not additive; therefore, the percentage cannot be properly calculated.

the proportion of B.C.'s overall exports comprised of high technology goods dipped to 3.1%.

B.C. HIGH TECHNOLOGY COMMODITY EXPORTS CONTINUED TO GROW IN 2013



In 2013, B.C.'s high tech exports grew 3.7% to over $1 billion

In 2013, high technology exports to the United States grew 3.8%, almost the same rate of increase of high tech exports overall. There was a slight decline of 1.8% in shipments of high tech products to the European Union, but exports to the Pacific Rim jumped 22.0%.

The value of high technology imports into B.C. grew 4.2% in 2013, with a mixed performance depending on the origin of the goods. The value of imports from Mainland China dipped 1.5% in 2013, but China remains the top source for high tech goods for B.C. with $1.7 billion worth of high tech commodities imported into B.C. from China. Imports from the U.S. climbed 2.4% in 2013 and were valued at $1.5 billion. Together, Mainland China and the U.S. were responsible for 57% of all the high tech goods imported into the province. Despite the decline in imports from Mainland China, high tech commodity imports from the Pacific Rim as a whole climbed 2.7% in 2013. There was strong growth of 9.4% in high tech imports from the European Union and a 5.6% rise in shipments from Mexico.

British Columbia imports substantially more high technology goods than it exports and, as a result, the province runs a trade deficit in these commodities. In 2013, this trade gap widened slightly as exports grew marginally slower than imports. The deficit increased to $4.3 billion, or more than four times the total value of B.C.'s high tech exports.

Computers and telecommunications products dominate both exports from and imports to British Columbia, with aerospace goods and life sciences products (which are mainly comprised of medical equipment) the next two most important commodity groups.

Trade in goods is an important component of B.C.'s high tech sector, but trade in services plays an even larger role. B.C.'s exports of high tech services increased in 2013, rising by 3.6%, almost the same rate of growth of high tech goods. In 2013, services represented three-quarters of B.C.'s total high technology exports (i.e., goods plus services).

1.4. B.C. still has a relatively small high tech sector compared to other jurisdictions

British Columbia's high technology sector ranked fourth among the provinces in GDP, revenue, employment, average weekly earnings and business counts, but was third in value of international exports. The province has a much smaller high tech sector than the majority of U.S. states as well, with high technology making up a far smaller share of employment and GDP than the majority of states.

2. Introduction

2.1. The study of high technology

Technological advances over the last couple of decades have had a tremendous impact on the world, changing how people work and play and even how people communicate with each other. Much of the technology we have today was the stuff of science fiction not that long ago. While we have yet to develop a flying car, we do have mobile telephones with video capability as well as a global information network available to anyone with an Internet connection.

The technology sector offers substantial opportunities for economic growth; therefore, it is important to track activity in the high technology sector to ensure that these opportunities are not squandered. With this in mind, the *Profile of the High Technology Sector* is part of an ongoing effort to monitor the growth and performance of the high technology sector in British Columbia by evaluating the economic contribution of firms that produce high technology goods and services. The key indicators examined include gross domestic product, revenue, employment, wages and salaries, business counts and international trade.

The characterization of a high technology sector within traditionally-defined industrial sectors of the economy is based on the premise that high technology firms behave in a manner that allows them to be understood as a group and that programs or policies can be tailored to respond to their needs.

2.2. Defining high technology

In general terms, high tech is defined as technology that is at the cutting edge and is usually associated with strong economic growth and advanced technological development. Since research and development (R&D) is a key factor in technological advancement, those industries that perform a significant amount of R&D often have a considerable high tech component. However, an industry does not necessarily need to be R&D intensive to be considered high tech. Industries that produce goods or services that are uniformly recognized as high tech outputs are also included in the high technology sector. The concept of the high technology sector used in this report is basically product-based; therefore, some manufacturers that employ advanced processes are not included. In other words, just because a good is produced using advanced processes does not

automatically make it a high tech product. For example, a tomato produced in a high tech greenhouse is still just a tomato.

There are many different definitions of high technology in use around the world. This report uses two different definitions—one that is industry-based and another that is commodity-based—to measure, respectively, high tech's contribution to the British Columbia economy and the volume of international trade in high technology goods.

Since the inception of the *Profile* reports in 1996, statistics on the high technology sector have been constructed using information from standard industries defined under the North American Industry Classification System (NAICS).[2] This industry-based approach offers consistency with other Statistics Canada data, as well as comparative data for other provinces and the United States, with a reasonable degree of accuracy.

It should be noted that the high technology definition used by BC Stats is a British Columbia-focused classification. Some high technology industries that are not present in British Columbia, but may be prevalent elsewhere, may be excluded from the data presented in this report. Conversely, some industries that have a substantial high tech component in British Columbia and are therefore included in the high technology sector may be mainly low tech in other regions. For example, the fuel cell industry is included in the NAICS classification 335990 (all other electrical equipment and component manufacturing), which is generally not considered a high technology industry. However, given the presence of the fuel cell cluster in B.C., it makes sense to include it in B.C.'s high tech sector definition.

The industry-based definition includes manufacturers of pharmaceuticals and other chemicals, computers and other electronic products, aerospace products and parts, and medical equipment and supplies. Also included are service industries such as engineering, computer services, motion picture and video production, surveying and mapping, scientific and technical consulting, telecommunications, and research and development.

For a more detailed discussion of the industry-based definition used in this report, including a complete listing of the industries included in BC Stats' high technology definition, see Appendix A, "Defining the High Technology Sector." Note that, due to confidentiality requirements, the industry detail available for reporting purposes is

[2] NAICS is a system of classifying industries developed in cooperation between Statistics Canada, the United States Office of Management and Budget and the Instituto Nacional de Estadística, Geografía e Informática of Mexico.

limited. For most of the data tables in this report, the manufacturing industries are not reported separately and service industries are grouped into the following categories: motion picture production and post-production; telecommunications; engineering services; software publishing; other computer and related services; and other services.

While an industry-based definition makes sense when examining high technology GDP or employment, it is not really appropriate for looking at trends in high tech commodity exports and imports. For this purpose, a second, commodity-based definition was developed. This definition was constructed using harmonized system codes, which are the commodity classification codes used in Canadian customs documents. The list of commodities classified as high technology products was based on the U.S. Bureau of the Census' advanced technology products (ATP) list, which is a recognized definition of high technology goods. Since Canadian and American commodity codes are identical only at the six-digit level and Canadian export codes are eight digits and import codes are ten digits, it was necessary to do some conversion. As a result, the final definition may not be identical to that used in the United States; however, it is reasonably similar and allows for broad comparisons.

For more detail on the commodity-based definition used in this report and a brief description of the ATP categories, see Appendix B, "Defining High Technology Commodities."

2.3. New to this year's edition

This report includes the latest information available as of November 2014. It should be noted that data revisions may result in differences between this and earlier editions of this publication. There have been significant changes to some of the data sources used to develop the figures in this report, which in some cases have resulted in larger than normal revisions to the high technology estimates. In addition, there have been some methodological improvements that have also resulted in revisions.

With this edition, the provincial comparisons have been expanded to include estimates for Saskatchewan, such that the report now includes high technology sector estimates for each of the Prairie provinces, Ontario and Quebec, as well as the Canadian total.

Readers should note that graphs and text in this publication deal only with the highlights of the information that has been collected. The data tables preceding the appendices contain additional useful detail.

2.4. Input Indicators of the British Columbia High Technology Sector

This *Profile* report provides an overview of the outputs of the high technology sector in British Columbia; however, it is also useful to look at the inputs to the high technology sector. To this end, BC Stats produces a companion report: *Input Indicators of the British Columbia High Technology Sector*. The *Indicators* report provides measures of the inputs to the high technology sector and the overall climate of innovation in British Columbia. It covers a variety of activities with respect to high technology in the educational, business, government, external and labour sectors. Whenever possible, the indicators are presented in comparison to other provinces, which serve as benchmarks for the situation in British Columbia.

3. Profile and Trends

3.1. Gross Domestic Product

3.1.1. High tech sector GDP expands in 2013

There was a 2.2% boost in the GDP of British Columbia's high technology sector in 2013.[3] All industry sectors experienced some growth in GDP in 2013. In the manufacturing sector, high tech GDP saw robust growth of 8.8%, to almost $1.6 billion, a high level mark exceeding the previous peak of $1.5 billion recorded in 2000. Growth was much slower in the service sector, at only 1.4%.

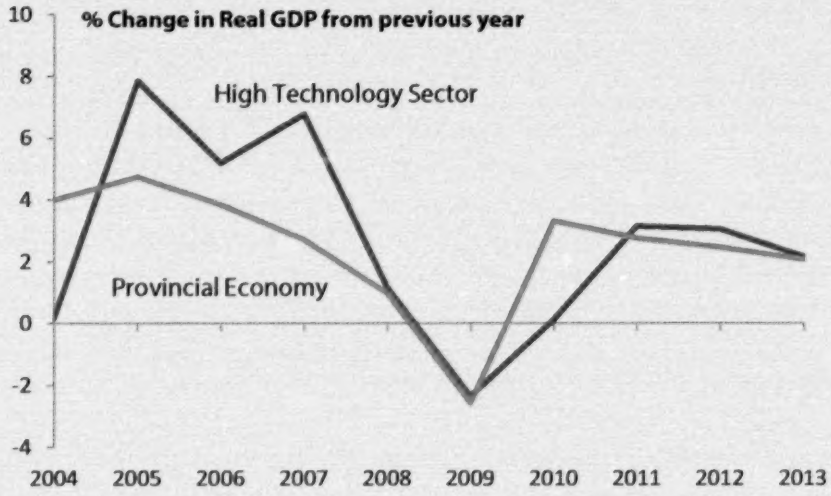
The largest increase in high tech GDP in the service sector was for engineering services, at 3.0%. GDP for telecommunications and film climbed 1.1% and there was marginal growth of 0.6% in GDP of computer and related services. All other high tech services experienced a 1.7% rise in GDP.

In general, B.C.'s high technology sector tends to outperform the general economy. In the last decade this has been the case in all but two years (2004 and 2010). Similar to most industries, the global economic downturn that occurred late in 2008 and dragged on through 2009 had a negative effect on B.C.'s high tech sector. High tech GDP fell 2.4% in 2009 and was basically flat in 2010, before finally regaining some steam in

[3] All GDP figures quoted in this paper are in chained 2007 constant dollars unless otherwise stated.

2011. From 2011 on, high tech GDP has grown faster than the industrial aggregate, re-establishing the trend that was evident prior to the global economic slump.

FIGURE 1: REAL GDP GROWTH FOR HIGH TECHNOLOGY AND OVERALL ECONOMY, BRITISH COLUMBIA



In most years, B.C.'s high tech sector GDP has grown faster than the overall economy

Although the high tech sector in B.C. is still relatively small, it plays a significant role in B.C.'s economy. In 2013, high tech generated approximately 6.5% of the province's GDP, putting it in the same ballpark as industries such as mining, quarrying, oil and gas extraction, and health care.[4] By comparison, B.C.'s forest sector (wood, pulp and paper production, logging and silviculture) produced around 3% of total GDP. The real estate and rental and leasing sector (including owner-occupied dwellings) generates the greatest contribution, at just over 17% of GDP.

3.1.2. Services constitute the bulk of high tech GDP in B.C.

In 2013, around 92% of B.C.'s high tech GDP was generated by the service sector. High technology service sector industries produced almost $11.6 billion in output, while high tech manufacturing industries generated just under $1.6 billion.

[4] This percentage is calculated using current dollar GDP estimates, since the constant dollar value of the B.C. industrial aggregate is chained and chained data are not additive; therefore, the percentage cannot be properly calculated.

TABLE A1: B.C. GDP, 2013 (CHAINED 2007 DOLLARS)

	$million	% change 2012/2013
Manufacturing	1,579	8.8
Services	11,566	1.4
High Tech Total	**12,526**	**2.2**
B.C. Total	**198,278**	**2.1**

While it is useful to examine the high technology industry's performance relative to other industries in British Columbia and to look at trends comparing the industry's performance today to what it was a year ago or a decade earlier, one cannot really judge the size and scope of B.C.'s high tech sector without comparing it to high tech sectors in other jurisdictions.

Among Canadian provinces, British Columbia ranks fourth in most of the high technology indicators in this report, with the exception of exports, for which B.C. is ranked third.

3.1.3. B.C. ranks fourth in the country in high technology GDP

The bulk of Canada's high technology sector resides in central Canada. Together Ontario and Quebec account for approximately two-thirds of Canada's high technology GDP. In 2013, Ontario's high tech sector generated $45.8 billion in GDP, or around 43% of the Canadian total. Quebec ranked second with $24.9 billion in high tech GDP, followed by Alberta with $17.7 billion and B.C. with $12.5 billion. The output from B.C.'s high tech sector comprised around 12% of total Canadian high tech GDP in 2013.

In 2013, roughly 80% of the Canadian high tech sector's GDP was generated by the service sector. Among the high tech provinces, Quebec and Manitoba had the lowest shares of high tech GDP generated by the service sector, at 69% and 76% respectively. The large aerospace industry and significant production of pharmaceuticals are the main reasons that manufacturing makes up a larger portion of the high tech sector in Quebec than in the rest of the country, and the aerospace industry has a substantial presence in Manitoba as well. In Saskatchewan, the service sector was responsible for 95% of provincial high tech GDP, the highest share among the provinces for which data are available. In Ontario, the service sector accounted for 80% of the high tech output, compared to 87% in Alberta and 92% in British Columbia.

There was significant variance in the rate of growth of high tech sector GDP across the country in 2013. Nationally, high tech GDP expanded 1.1%, with a 2.1% decline in the

manufacturing sector being offset by a 1.4% increase in service sector GDP. The strongest growth was in Saskatchewan, where a 5.0% rise in service sector GDP was enough to offset a 14.3% plunge in manufacturing GDP, such that the overall high tech GDP climbed 3.0%. Alberta saw the next highest rate of growth, at 2.8%, followed by B.C., at 2.2%. Quebec, where GDP grew 1.9%, was the only other province to exceed the national rate of growth. Ontario saw a small increase in high tech sector GDP of 0.2%, with a 6.7% decline in the manufacturing sector tempering overall growth. Manitoba was the only province to experience a decline, with GDP falling 1.0%.

3.1.4. High technology plays a far bigger role in the United States

High technology encompasses a significantly greater share of the American economy compared to the high tech sector in Canada. Over 10% of U.S. GDP was generated by the high tech sector in 2013, or nearly $1.8 trillion.[5] By comparison, high tech comprised just over 7% of Canada's GDP and Canadian high tech output was around 7% of the U.S. total.

In 2013, the states where the high technology sector contributed the most to GDP were Oregon, Washington and California. Oregon's high technology sector was responsible for around 23% of the state's GDP. This may come as a surprise to many who see Oregon as largely a producer of lumber, but the state is home to a significant high technology hub that has garnered the nickname of the "Silicon Forest." Oregon's high tech sector is concentrated primarily in manufacturing of high tech goods and is the location of the factories of high tech giants such as Intel and Hewlett-Packard.

In Washington State, the high tech sector generated over 21% of the state's GDP. Washington has substantial software and aerospace sectors, led by industry leaders Microsoft and Boeing, respectively. Almost 16% of California's GDP was derived from high tech industries in 2013. California is home to "Silicon Valley" where many of the world's largest high tech corporations reside and, of course, Hollywood, the centre of the motion picture industry, is located in the state.

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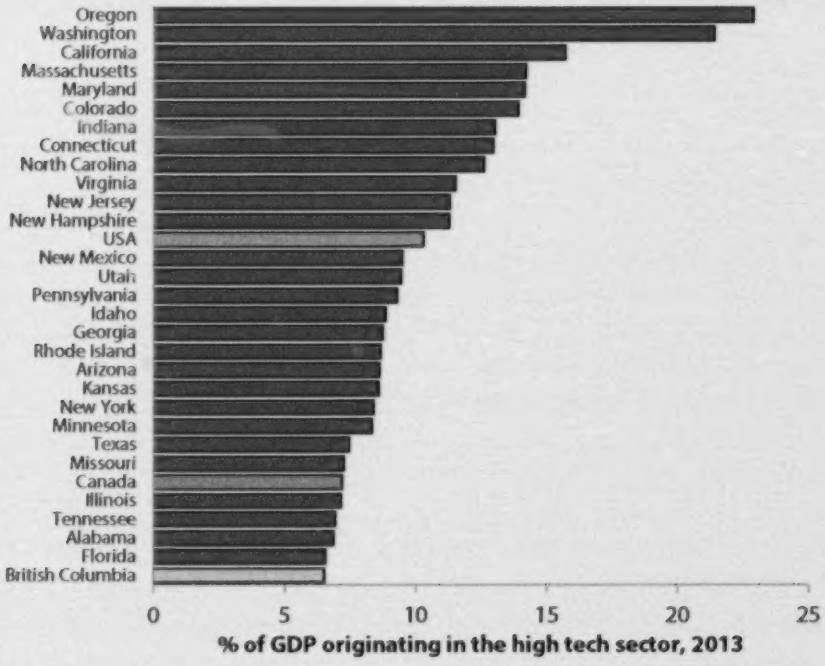
[5] All dollar figures for the United States have been restated in Canadian currency to allow direct comparison with Canadian figures. An annual average of the Canada/U.S. exchange rate was used to perform this conversion. All GDP figures for the U.S. are in current dollars and comparisons with Canada and the provinces are made using current dollar figures.

FIGURE 2: HIGH TECHNOLOGY GDP BY STATE, 2013



High technology industries play a significant role in the economies of many U.S. states

California has by far the largest high tech sector in the United States in terms of total value of output, generating $356.0 billion in GDP in 2013. California alone accounted for a fifth of the nation's total high tech GDP. The value of GDP produced by California's high tech sector alone was more than two and a half times that of all high tech output in Canada as a whole.

Overall, high technology plays a far more significant role in the economies of most American states than it does in Canadian provinces. In 2013, there were 28 states where high tech contributed more as a proportion of GDP than in British Columbia. Even in Quebec, where high tech generated 9.3% of GDP in 2013, the province ranked below 14 states. In absolute terms, based on the value of output generated by the sector, almost half the states had larger high tech sectors than British Columbia in 2013.

3.2. Revenue

3.2.1. High technology revenue increased in 2013

In 2013, revenue generated by British Columbia's high technology sector was around $23.3 billion, an increase of 5.2% from 2012.[6] All industry groups experienced revenue growth, with the software publishing industry leading the way with a 14.4% jump in revenues. Engineering services also saw strong growth, with revenues rising 8.8%. The strong growth in these two industries helped push revenues in the high tech service sector up 4.2%. However, that growth paled in comparison to the increase in the high technology manufacturing sector, where revenues soared 11.1%.

3.2.2. B.C.'s high tech sector had the second highest revenue growth among the provinces in 2013

B.C.'s 5.2% rise in revenue placed it second in revenue growth among the six provinces for which data have been estimated, exceeded only by Alberta, where high tech revenues expanded 5.5%. Other than Saskatchewan, which saw a drop in revenue of 1.5%, all other provinces recorded higher revenues. Quebec, with a 3.3% rise in revenues, was the only other province to exceed the national average growth rate of 1.6%. The engineering and computer and related services industries led the advance in Alberta, while strong growth in the manufacturing sector drove the high tech revenue increase in Quebec. The Canadian average growth in high tech revenue of 1.6% is comparable to the 1.5% increase in U.S. high tech revenues.

3.2.3. Over the last decade, B.C. has outpaced the national average in revenue growth

High technology revenues in B.C. have significantly outpaced overall Canadian high tech revenue growth over the last decade. The Prairie provinces have experienced the fastest rise in high tech revenue over the last ten years, while the more manufacturing-intensive central Canadian provinces of Ontario and Quebec each trailed the national average.

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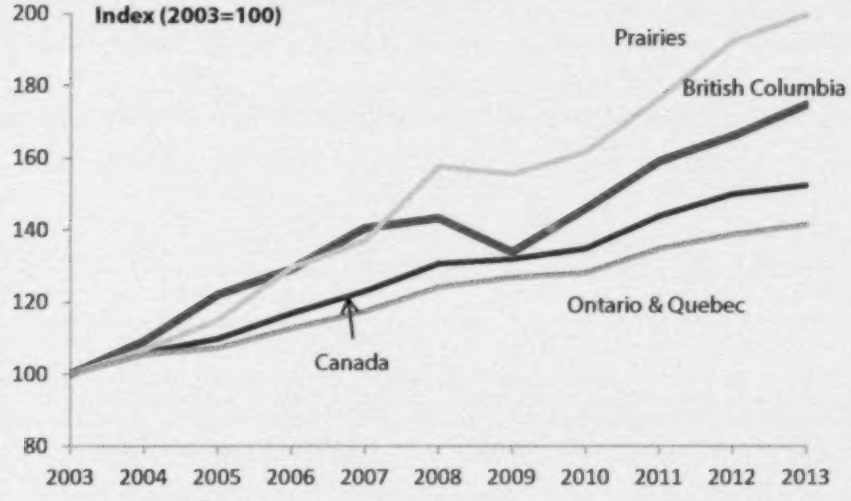
[6] Note that all revenue, wage and trade figures in this report are in current dollars as sufficient information is not available to calculate constant dollar figures. As such, growth rates include the effects of inflation.

FIGURE 3: INDEX OF HIGH TECH REVENUE GROWTH



Growth in B.C.'s high tech revenues has outpaced the Canadian average over the last decade

3.3. Employment

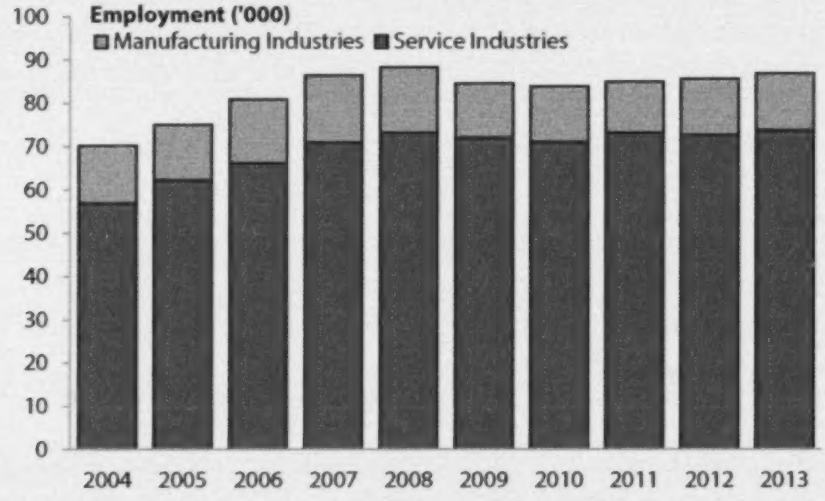
3.3.1. B.C. high tech sector employment increased in 2013

In 2013, employment in British Columbia's high technology sector climbed for the third consecutive year, rising 1.4% to 86,800.[7] However, employment levels are still well below the 2008 peak of 88,270, before the global economic downturn reduced employment in many sectors. In 2013, a 16.4% boost in engineering employment more than offset a 14.2% drop in telecommunications jobs. In 2011 and 2012, it was the film sector that hampered sector growth, with slumps in employment of 10.5% in 2011 and 30.6% in 2012. The motion picture production and post-production industry shed almost 3,000 jobs in that two-year period; however, employment held steady in 2013, even increasing slightly, by 1.2%.

[7] The measure of employment used in this report is based mainly on Statistics Canada's Survey of Employment, Payroll and Hours (SEPH). This employer survey provides a wealth of detail about employment, wages and hours in a large number of industries. However, because it is an employer survey, the SEPH data do not include self-employed workers and workers in commercial fishing, agriculture and some services.

The data from SEPH give an average number of workers in an industry through the course of the year. If an industry is highly seasonal, the peak number of workers is offset by those months where there are fewer workers. A full-time worker is accorded equal status with a part-time worker. No attempt is made to measure the number of "person years" or "full-time equivalents."

FIGURE 4: BRITISH COLUMBIA HIGH TECHNOLOGY EMPLOYMENT



High tech employment has increased in each of the last three years, but has underperformed the industrial aggregate

Despite the rise in jobs over the last few years, the high tech sector in B.C. has trailed the industrial aggregate in terms of employment growth in each of those years. The global economic downturn hit the tech sector harder than the overall economy and it has taken some time to recover. Prior to the downturn, employment in the tech sector in B.C. consistently grew faster than that of the industrial aggregate.

3.3.2. Most of B.C.'s tech workers are employed in the service sector

Almost 85% of workers in the high technology sector in British Columbia were employed in a service industry in 2013, up from 80% ten years earlier. Two high tech service industry groups—other computer and related services (excluding software publishing), and engineering services—employed more people than all high tech manufacturing industries combined. There were 13,030 high tech manufacturing employees in B.C. in 2013, compared to 21,950 workers in other computer and related services' jobs and 18,380 in engineering services.

TABLE A2: B.C. EMPLOYMENT, 2013

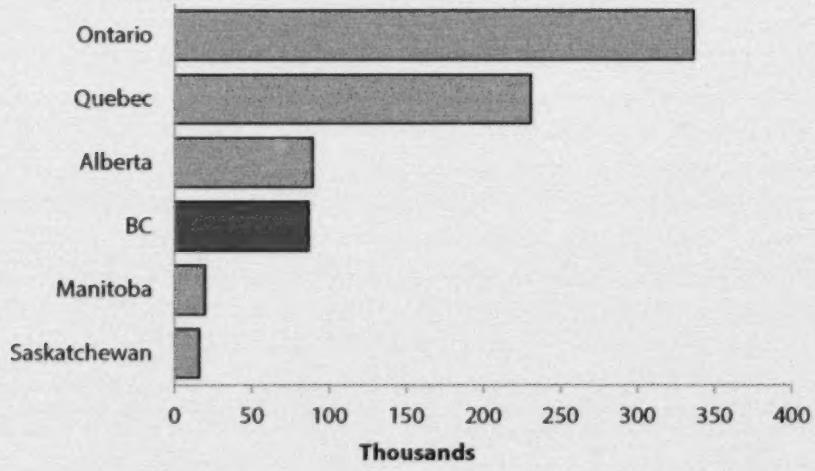
	Workers	% change 2012/2013
Manufacturing	13,030	0.7
Services	73,770	1.5
High Tech Total	**86,800**	**1.4**
B.C. Total	**1,981,750**	**1.8**

B.C.'s high technology sector employs more people than the mining, oil and gas, and forestry sectors combined, which underscores the importance of high tech to the provincial economy. In 2013, there were around 43,100 people working in B.C.'s forest sector (which includes logging, silviculture, and wood and paper manufacturing industries) and 22,800 employed in the mining, oil and gas sector, for a total of 65,900, compared to 86,800 people employed in the high tech sector.

3.3.3. B.C. has the fourth largest high tech workforce in Canada

British Columbia's high technology employment ranks fourth in the country. Ontario leads the way with 336,140 employed in the high tech sector, or 41% of all Canadian high tech workers. Quebec is home to 28% of the country's high tech employees, more than Alberta (11%), B.C. (11%), Manitoba (2%) and Saskatchewan (2%) combined.

FIGURE 5: HIGH TECHNOLOGY EMPLOYMENT BY PROVINCE, 2013



B.C. ranked fourth in high tech employment in Canada in 2013

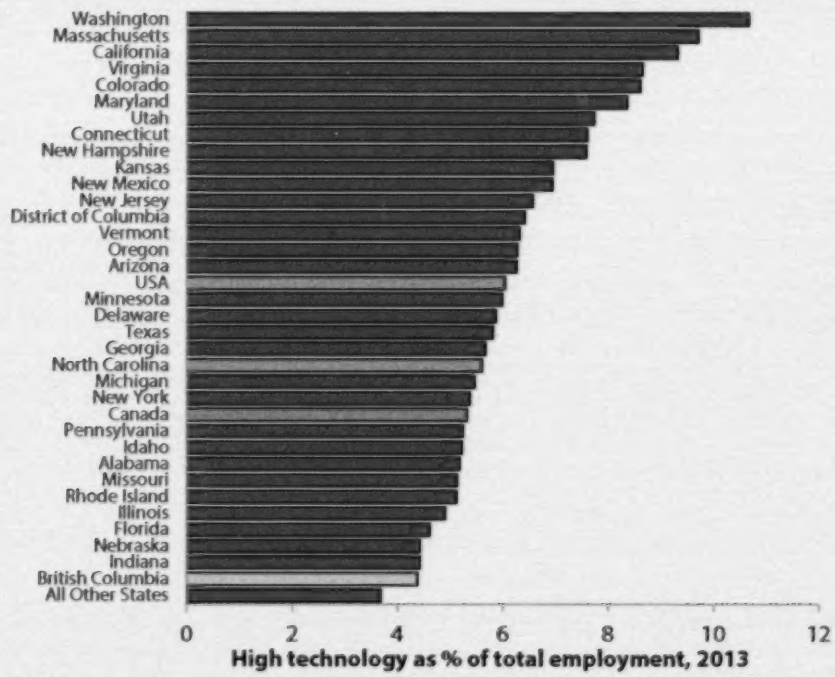
In 2013, Alberta's tech sector led the country in terms of job growth, with employment rising 3.2%, followed by Manitoba, with a 2.7% boost in employment. Quebec was the only province to see high tech employment fall, with a 1.0% drop in tech jobs. B.C.'s 1.4% job growth was better than the national average of 0.9%. As with B.C., growth in tech jobs trailed that of the industrial aggregate for Canada as a whole and for most provinces, with the exception of Manitoba and Ontario.

Overall, the high technology sector employed approximately 4.4% of British Columbia's work force in 2013, placing B.C. fourth among the high tech provinces, marginally behind Alberta's 4.5%. Quebec, at 6.6%, has the largest share of its workforce in the high tech sector, followed by Ontario (5.7%). Manitoba and Saskatchewan each had 3.3% of their workers in high tech jobs. The high tech sector employs approximately 5.3% of all workers in Canada.

3.3.4. A greater percentage of Americans are employed in high tech industries

Relative to Canada, the United States has a greater proportion of its workforce employed by high technology industries. In 2013, 6.0% of American employees worked in high technology industries.[8] Among the states, high technology's share of total employment ranged from a high of 10.7% in Washington State to a low of 2.5% in Wyoming. Other states where the high technology sector is a prominent employer include Massachusetts (9.7%), California (9.3%), Virginia (8.7%), Colorado (8.6%) and Maryland (8.4%).

FIGURE 6: HIGH TECHNOLOGY AS A PERCENT OF TOTAL EMPLOYMENT, 2013



Washington State has the largest share of employment comprised of high technology workers

[8] Similar to the Canadian numbers, the employment data used in this report comes from an employer survey (*Quarterly Census of Employment and Wages*), so self-employed workers are excluded.

A total of 32 states ranked ahead of British Columbia in terms of the sector's importance as an employer.[9] Even Quebec, with Canada's highest rate of employment generated by the high technology sector, ranked slightly behind New Mexico, which placed 11th in the United States.

The U.S. tech sector employed almost 8.1 million people in 2013, up 1.5% from a year earlier. Just shy of 18%, or 1.4 million of these high tech employees resided in California, more than double that of second-ranked Texas, which had just over 0.6 million employees in the sector.

More than a third (35%) of high tech workers in California were employed in companies that manufactured computers or provided computer systems design services. Engineering companies and the motion picture industry were also major high tech employers in California. Over half of the jobs in the motion picture industry in the U.S. are located in California. Comparatively, B.C. is the location of only 10% of Canada's film employment, despite its reputation as Hollywood North (Quebec leads the way in Canada, with 48% of Canadian motion picture employment, likely due to the presence of the French-language industry in that province).

Relative to Canada, manufacturing jobs make up a slightly larger share of high technology sector employment in the United States. In 2013, about 30% of all high tech jobs in the United States were in manufacturing industries, compared to 23% for Canada and just 15% in British Columbia. Given that businesses in manufacturing industries tend to have more staff on the payroll than those in the service sector, this could explain why high tech workers comprise a larger share of the total employed workforce in the U.S. than in Canada.

In 2013, there were three states where manufacturing industries employed at least half of the state's high tech workforce, topped by Vermont at 51%. At the other end of the scale, high technology employment in the District of Columbia, Alaska and Hawaii was almost all in the service sector, with 3% or fewer of high tech workers in those states employed in manufacturing industries.

[9] For ease of reporting, the District of Columbia is counted as a state.

3.4. Wages and Salaries

3.4.1. High tech wages and salaries hit all-time high in 2013

Aggregate wages and salaries in British Columbia's high tech sector continued to climb in 2013, reaching a new peak for the third consecutive year.[10] In 2013, total high technology wages and salaries rose 1.7%, to almost $6.3 billion. However, this was well below the wage growth across all industries in the province, which was 2.8%. Wage growth in the manufacturing sector outpaced that of the service sector by a wide margin, with a 5.2% rise in high tech manufacturing wages and salaries, compared to only 1.2% in the service sector. The significant drop in employment in the telecommunications industry resulted in a substantial decline of 25.5% in wages and salaries in that sector. Wages and salaries in other computer related services edged down 0.9%, but the other high tech industry groups all saw their payrolls rise, led by a 14.3% jump in software services and a 12.3% rise in the motion picture industry.

Despite higher payrolls, average weekly earnings of B.C.'s high tech workers remained steady at $1,390. However, different industries in the sector did see changes in earnings. Earnings in the high tech manufacturing sector climbed by 4.5%, but that growth was offset by a marginal 0.3% drop in service sector pay.

The highest growth in average weekly earnings was in the software publishing industry, with pay hikes of 12.4%, followed by the motion picture production and post-production industry, with growth of 11.0%. The telecommunications industry experienced a stiff reduction in earnings, with pay dropping 13.2%. There was also a significant drop in the pay of engineers, at 6.6%, although this could be the result of an influx of inexperienced workers at lower wage scales, given the strong growth in employment.

3.4.2. Workers in B.C.'s high tech sector earn significantly more than the provincial average

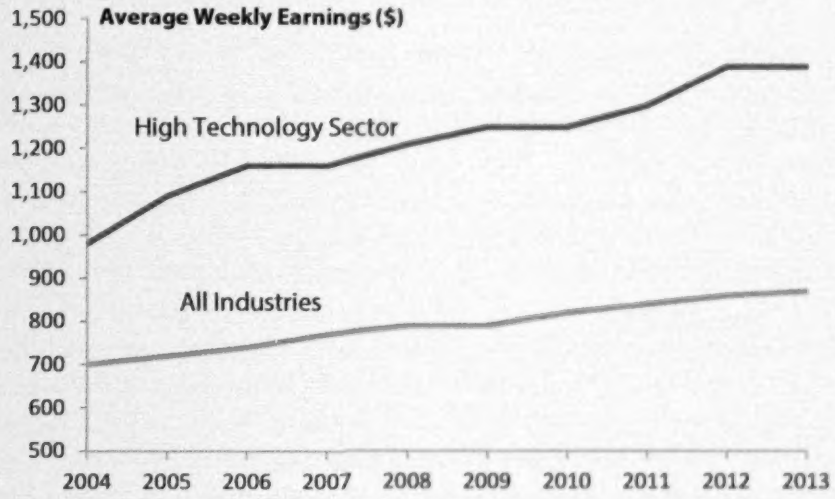
On average, workers in B.C.'s high technology sector earn far more than the average employee in the province. In 2013, average weekly earnings of high tech employees were

[10] Wages and salaries are based on the earnings of all workers in an industry who are on the payroll, from working owners and senior executives to junior support staff. While overtime and bonus pay are included, other benefits such as medical plans, stock options and time off in lieu of overtime are not. Like the employment values described earlier in this report, the wages and salaries data are mainly calculated using source data from Statistics Canada's Survey of Employment, Payroll and Hours.

$1,390 per week, compared to just $870 for the average B.C. worker. The service sector had the largest discrepancy, with average weekly earnings of $1,440 in the high tech sector, compared to only $820 for the average worker in the service sector as a whole. In the manufacturing sector, the difference was not only smaller, but the average earnings of $1,080 per week for a tech worker were actually less than the $1,120 per week earned by an average worker in the manufacturing sector as a whole. B.C.'s tech sector is unusual in that workers in the goods sector earn less than those in the service sector.

The disparity in wages for high tech workers and those in other industries is likely due to a combination of greater skill requirements relative to many jobs, as well as a strong demand for skilled high technology workers, therefore requiring greater pay to both attract and retain them.

FIGURE 7: AVERAGE EARNINGS IN THE HIGH TECHNOLOGY SECTOR COMPARED WITH ALL INDUSTRIES, BRITISH COLUMBIA



Wages in high technology industries are far higher than the average for all industries in the province

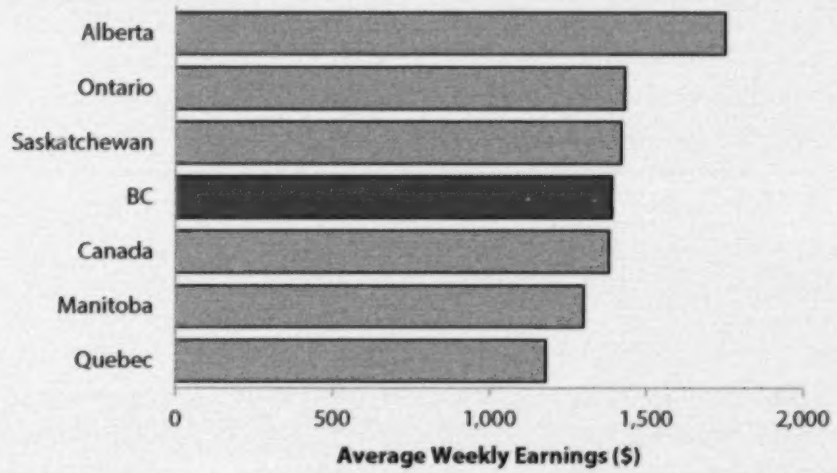
Engineers are the highest paid workers in B.C.'s high tech sector, with average weekly earnings of $1,760, well above the $1,390 average weekly pay for the sector as a whole. At only $640 per week, on average, the motion picture production and post-production industry had by far the lowest pay among high technology industries.

3.4.3. Earnings of high tech workers in B.C. are higher than the national average

In 2013, the $1,390 in average weekly earnings for high tech employees in B.C. was a slightly higher rate of pay than the national average of $1,380. High tech workers in

Alberta earned by far the most, on average, at $1,820 per week. Second-ranked Ontario, with average weekly earnings of $1,430 in the tech sector, paled by comparison. The pay was particularly lucrative for Alberta's engineers and for employees of the computer systems design and related services industries. High tech workers in Quebec earned well below the Canadian average, at $1,180 per week.

FIGURE 8: AVERAGE EARNINGS IN THE HIGH TECH SECTOR BY PROVINCE, 2013



B.C. high technology average earnings were higher than the national average in 2013

With the exception of Saskatchewan, where wages dipped slightly, all provinces experienced wage inflation in the high technology sector in 2013. British Columbia was the only other province with wage growth below the Canadian average of 3.2%. Quebec saw wage inflation of 4.6% in the high tech sector, which was the highest rate of growth in the country. Alberta had growth of 4.1%, followed by Ontario with 3.9%. Manitoba's high tech earnings grew at the same rate as the national average (3.2%).

Wages in Canada are relatively low compared to pay in the high tech sector in the United States. In 2013, the average weekly wage for high tech workers in the United States was $1,887, ranging from $1,107 in South Dakota to $2,450 in California. There were 37 states where high tech employers paid more, on average, than British Columbia's high tech workers received. Given this disparity, one can see why high tech companies in British Columbia may have trouble recruiting skilled employees during periods when the labour market is tight. A large part of the problem is that most of the high tech companies in B.C. are small and likely cannot afford to pay as much as larger businesses in the United States.

3.5. Business Counts

3.5.1. Number of high tech businesses in B.C. rises in 2013

The count of businesses in B.C.'s high tech sector climbed for the second consecutive year after two years of contraction, likely related to the global economic downturn that occurred late in 2008 and dragged through most of 2009. In 2013, there were 9,738 high tech businesses with employees in the province, up 8.1% from 2012.[11] That was almost double the 4.4% rise in the total number of businesses in the province.

Both small high tech businesses (with fewer than 50 employees) and medium-sized businesses (with 50 to 499 employees) experienced robust growth, with business counts increasing by 8.1% and 9.3%, respectively. However, there was a contraction in the number of large high tech companies (500 or more employees), which was already small to begin with. The count of large high tech businesses fell from 15 in 2012, to 12 in 2013, a drop of 20.0%.

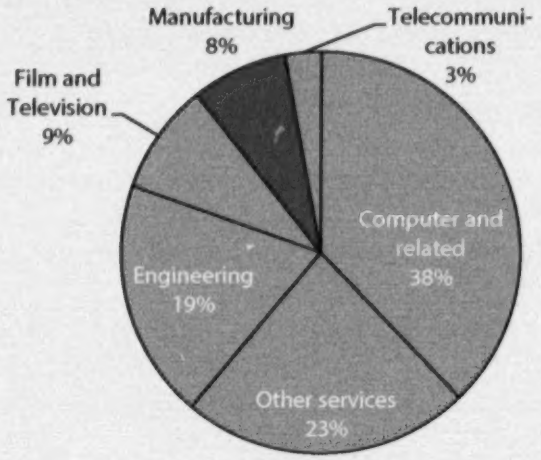
Every high tech industry group experienced growth in the number of businesses in 2013. The service sector saw an 8.3% boost in the number of businesses, led by the motion picture production and post-production industry (+10.9%) and computer and related services (+10.4%). The manufacturing sector also saw robust growth with business counts rising 5.0%, led by a 13.3% jump in the number of businesses in the chemicals and pharmaceuticals industry.

3.5.2. Most of B.C.'s high tech businesses are in the service sector

The service sector accounts for 92% of all high technology businesses in British Columbia. In 2013, of high technology businesses with employees, 8,983 were in service industries and 755 were manufacturers.

[11] Owner-operated firms with no paid employees are not included in the tabulation of business counts.

FIGURE 9: DISTRIBUTION OF B.C.'S HIGH TECH BUSINESSES, 2013



Service sector businesses dominate B.C.'s high tech sector

Computer and related services comprise the largest industry group within B.C.'s high technology sector, with 38% of the province's high tech businesses. "Other services" (23%) and engineering services (19%) are the next two largest high tech industry groups. Environmental and technical consulting industries are the largest component of the "other services" industry group, accounting for more than half of the businesses in that category.

3.5.3. High tech manufacturing firms employ more people

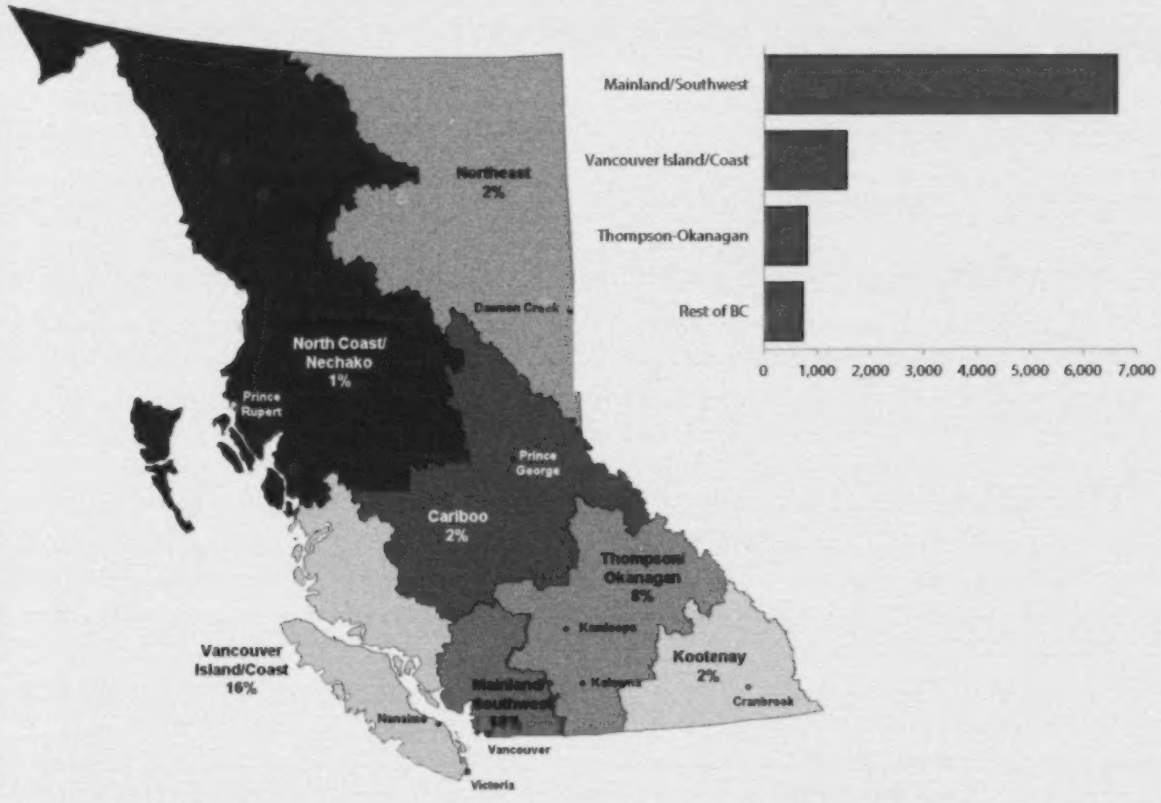
Among British Columbia's high tech businesses, those in the manufacturing sector tend to employ more people, on average, compared to those in the service sector. Of businesses with employees, 10% of high tech manufacturers employed more than 50 workers, compared to less than 4% of high tech service businesses. At the other end of the spectrum, fewer than half (47%) of high tech manufacturers have between one and four employees, while 71% of the businesses in the service sector fit this description.

3.5.4. High tech businesses are located where the people are

As one might expect, high technology businesses are most often located in the areas of the province that are most densely populated. In 2013, more than two-thirds (68%) of British Columbia's high technology businesses were located in the Mainland/Southwest Development Region, with most of those situated in Greater Vancouver. Another 16%

of the province's high tech businesses resided in Vancouver Island/Coast, with the majority of these located in the Capital region, and Thompson-Okanagan was home to 8% of B.C.'s high tech businesses.

FIGURE 10: DISTRIBUTION OF HIGH TECHNOLOGY BUSINESSES BY REGION, 2013



The Mainland/Southwest region is home to the head offices of the largest tech companies in the province, including Telus; MacDonald, Dettwiler and Associates; and Sierra Wireless just to name a few. There are a number of high tech clusters either already established or beginning to develop in the Greater Vancouver region, including alternative energy companies, digital media and gaming developers, biotechnology firms and a burgeoning wireless sector. The region is home to a number of fast-growing high tech companies that are poised to become global leaders, such as HootSuite, Global Relay and Avigilon and major international companies such as Microsoft, Sony and Amazon have opened offices in Vancouver. In 2013 alone, the region added 529 high tech businesses, translating to growth of 8.7% over 2012.

The Vancouver Island/Coast region has a strong information technology sector that provides software and web development, plus it has a significant presence in engineering, as well as environmental technology. The majority of the region's high tech companies are situated in Greater Victoria, which is the head office location of some of the province's larger high technology companies, including broadband hardware manufacturer Vecima Networks Incorporated and Carmanah Technologies Corporation, a manufacturer of solar powered systems and equipment. High tech businesses are also prevalent in areas outside the Capital region, particularly in the Nanaimo region. In 2013, the Vancouver Island/Coast region saw growth of 7.2% in high tech business counts, or a net addition of 103 high tech businesses.

The Thompson-Okanagan region has a variety of high tech companies, with significant concentrations in engineering and software development. In addition, this region has the potential to become a hub for data storage centres, such as the one built by RackForce in Kelowna and the Telus data centre in Kamloops. The region's climate and stable seismic environment, combined with an abundance of inexpensive, reliable power, makes it an ideal location for data centres. The growth in high tech businesses in Thompson-Okanagan trailed the provincial average in 2013, but still amounted to 3.0%, or 23 net new businesses.

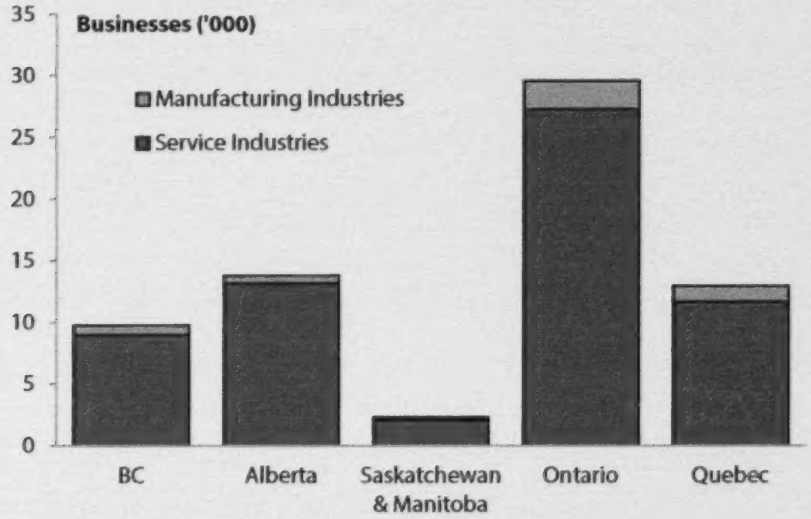
In the remainder of the province, there are a variety of high technology businesses, ranging from telecommunications to environmental technologies, but engineering, software, digital media, and web design and hosting are the most common. Each of the other regions experienced growth in the count of high tech businesses, with Kootenay leading the way, adding 23 net new businesses, a growth rate of 11.0%. Cariboo (13), North Coast & Nechako (6) and Northeast (2) all expanded their high tech sectors as well.

3.5.5. Provincial variance in business counts

British Columbia ranks fourth in the country with respect to the number of high technology businesses located in the province. Ontario leads the way with more than twice the number of high tech businesses of second-ranked Alberta. Alberta has more high tech firms than Quebec despite the fact that Quebec has more than two and a half times the number of high tech workers than Alberta. Similarly, Manitoba has fewer high tech businesses than the other provinces, even after employment differences are taken into account. Manitoba trails Saskatchewan to rank last in counts of high tech businesses among the provinces for which data are compiled. The explanation for these seemingly

contradictory numbers is that both Quebec and Manitoba have a larger manufacturing presence in their high tech sectors and manufacturing firms tend to employ more workers compared to service sector businesses. As a result, there are proportionately fewer small firms and more very large companies in Quebec and Manitoba compared to the other provinces.

FIGURE 11: COUNTS OF HIGH TECHNOLOGY BUSINESSES BY PROVINCE, 2013



In each province, the high tech sector is dominated by service industries

In Manitoba, 12% of high tech firms are in the manufacturing sector, while in Quebec, the ratio is 10%, compared to a national average of just over 7%. In Alberta, very few high tech businesses are in manufacturing, with 96% in service sector industries. There are other regional differences in industry distribution in the high tech sector as well. For example, in Ontario, well over half of all high tech firms (58%) are in the computer and related services sector, compared to just one quarter of high tech businesses in Alberta. In British Columbia, the film industry comprises almost 9% of high tech businesses, but in Alberta, just 1% of high tech firms are in the motion picture industry.

3.5.6. High tech businesses with no employees

Some high technology industries are ideally suited to self-employment, where the skills, knowledge and energy of the individual are more important than large capital investment. There is currently no perfect measure available of self-employment in the high tech sector as data by industry from Statistics Canada's *Labour Force Survey* are not detailed enough to derive a high tech aggregate. However, counts of businesses with no employees can be used to approximate the number of self-employed with no employees

(those with employees are counted in the number of businesses discussed earlier).[12] This is only an approximation because the figure may also include companies that hire only contractors, or companies with unpaid family workers.[13]

TABLE A3: BUSINESS COUNTS, 2013

	Without Employees	With Employees
Manufacturing	764	755
Services	32,033	8,983
High Tech Total	**32,797**	**9,738**
B.C. Total	**758,394**	**183,667**

In 2013, there were 32,797 high tech businesses with no employees, more than triple the count of high tech businesses with employees. As one would expect, businesses involved in manufacturing are far less likely to be composed of self-employed individuals with no employees. Just half of high tech manufacturers had no employees, compared to 78% of high tech service businesses.

3.6. Commodity Exports and Imports

3.6.1. International trade in high tech goods

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade. The domestic market for high technology goods[14] generally does not have sufficient volume to achieve the economies of scale needed to remain competitive; therefore, access to international markets is extremely important as it allows B.C. producers of high tech goods to focus on market niches. At the same time, B.C. manufacturers do not produce enough of some types of high technology equipment to satisfy the domestic demand from either consumers or the high tech industry itself, and as a result, large volumes of goods are imported into the province.

[12] Note that it would be erroneous to add these counts of self-employed to the total number of high technology workers reported elsewhere in this report due to the differences in what is being measured.

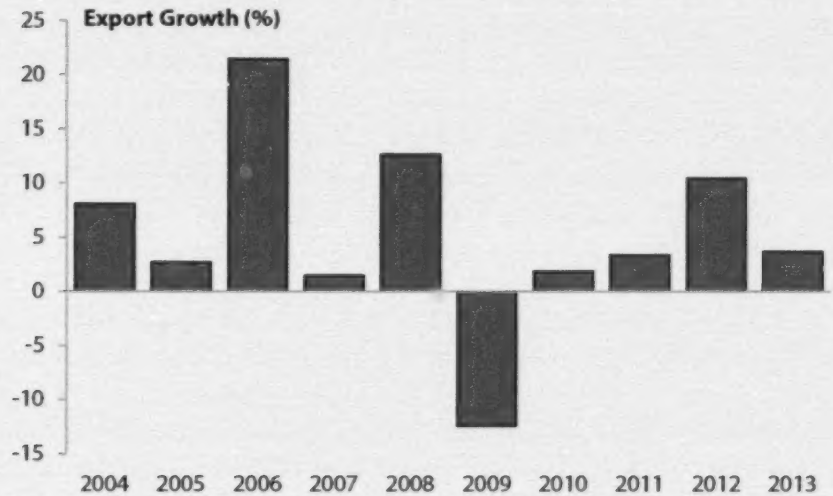
[13] For this reason, Statistics Canada classifies these businesses as having an "indeterminate" number of employees.

[14] High technology goods referred to in this document are based on a list developed by the U.S. Bureau of the Census and modified to fit Canadian conditions. See Appendix B, "Defining High Technology Commodities" for more information.

3.6.2. High tech goods exports increased in 2013

There was growth of 3.7% in the value of British Columbia high technology goods exports in 2013, which was well below the growth rate of total provincial commodity exports, which climbed 6.2%. As a result, the proportion of B.C.'s overall exports comprised of high technology goods dipped to 3.1%. However, British Columbia shipped over $1 billion worth of high tech goods to international destinations in 2013, which is the first time this milestone has been eclipsed.

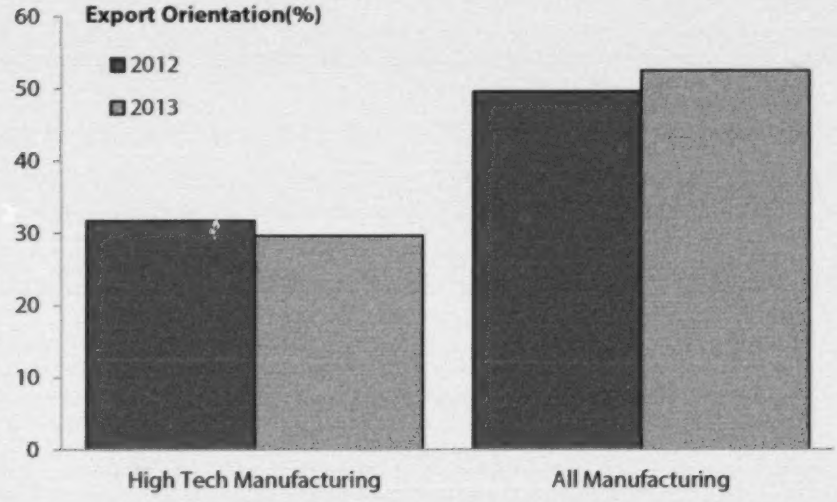
FIGURE 12: GROWTH IN BRITISH COLUMBIA HIGH TECHNOLOGY GOODS EXPORTS



B.C.'s high tech exports grew 3.7% in 2013 to exceed $1 billion for the first time

While exports are an important source of revenue for B.C.'s high tech sector, the province's high technology manufacturing industries tend to be geared more toward the Canadian market, particularly compared to manufacturing in the province in general. In 2013, just under 30% of total high tech goods manufactured in B.C. were exported, compared to almost 53% for B.C.'s manufacturing sector overall. This gap increased in 2013 as the proportion of high tech goods that were exported fell, while the share of all manufactured goods shipped out of the country rose. Prior to that, the gap had been narrowing as fewer manufactured goods were being exported, possibly due to the higher valued Canadian dollar, which made those goods more expensive for foreign buyers.

FIGURE 13: SHARE OF BRITISH COLUMBIA PRODUCTION EXPORTED INTERNATIONALLY



A smaller portion of high technology products are exported abroad compared to total manufacturing

3.6.3. Exports of high tech goods are concentrated in selected commodity groups

Almost two-thirds of B.C.'s high tech exports are concentrated in two commodity groups.[15] In 2013, around 38% of B.C.'s high tech exports were comprised of computers and telecommunications equipment, amounting to $394.5 million. This was up 1.2% from a year earlier, an increase of $4.8 million.

TABLE A4: B.C. HIGH TECHNOLOGY EXPORTS BY COMMODITY GROUP – 2013

	$ millions	% change 2012/2013
Computers and Telecommunications	394.5	1.2
Aerospace	281.2	13.8
Life Sciences	175.3	17.0
Computer Integrated Manufacturing	109.4	-18.6
Opto-Electronics	40.1	18.1
Electronics	21.3	-27.2
Biotechnology	3.8	-1.5
Material Design	3.8	3.6
Weapons and Nuclear	2.9	29.2
Total	**1,032.3**	**3.7**

Aerospace products represented another 27% of B.C.'s high technology commodity exports. British Columbia exporters shipped $281.2 million worth of aerospace products to international destinations in 2013, which represented a 13.8% jump from 2012.

[15] For information on high technology commodity groups, see Appendix B.

Other significant tech exports from the province were life sciences products (17%) and computer integrated manufacturing (11%). The remaining commodity groups accounted for just 7% of B.C.'s tech exports.

3.6.4. The U.S. is the primary destination for B.C. high tech exports

The United States is by far the most significant destination for British Columbia's high technology commodity exports. In 2013, 61% of all B.C. high tech goods exports were destined for the United States. While this is well down from the peak of 84% recorded in 2000, B.C.'s high tech sector is still proportionately more dependent on the U.S. market for export sales than are the province's exports overall. In 2013, only 46% of B.C.'s total goods exports were shipped to the United States.

TABLE A5: B.C. HIGH TECHNOLOGY EXPORTS BY DESTINATION – 2013

	$ millions	% change 2012/2013
United States	632.5	3.8
European Union	142.9	-1.8
Germany	31.2	-10.7
Netherlands	28.3	70.7
Italy	22.3	10.5
Pacific Rim	148.0	22.0
Mainland China	25.3	22.1
Australia	24.8	35.4
Japan	22.1	-7.0
Rest of the world	108.8	-9.0
Total	**1,032.3**	**3.7**

The value of B.C. exports of high technology goods to the U.S. was also at its peak in 2000, with $773.0 million worth of high tech goods shipped to the United States that year, a figure that has not since been achieved again. The bursting of the high tech bubble in 2001 was the main reason for the precipitous decline in tech exports between 2000 and 2001. While that is one reason for the drop in the proportion of high tech goods exports destined for the United States, market diversification accounts for most of the change.

For example, in 2003, the European Union received only 8% of B.C.'s high tech exports. That share climbed to 19% in 2008, although it has slipped back to 13% in 2013. Exports to Pacific Rim countries, which dropped as low as 4% in 2001 following the bursting of the high tech bubble, have rebounded somewhat to roughly 14% of exports, but are still well below peak levels attained in the mid-nineties.

In 2013, high technology exports to the United States grew 3.8%, almost the same rate of increase of high tech exports overall. There was a slight decline of 1.8% in shipments of high tech products to the European Union, but exports to the Pacific Rim jumped 22.0%. Much of this expansion was due to an almost quadrupling in the value of aerospace products shipped to Pacific Rim countries, particularly aircraft to Australia and Indonesia.

3.6.5. Mode of transport of high tech goods depends on destination

The mode of transport of high technology goods exported from the province depends largely on the destination of those goods and, to a lesser extent, on the types of goods being shipped. In 2013, almost 62% of B.C.'s high tech goods shipped to the United States were transported over land by truck or rail, with the remainder shipped by airfreight. For all other countries, the bulk of goods were transported by airfreight (82%), with only 15% shipped by sea and 4% over land.[16]

TABLE A6: B.C. HIGH TECH EXPORTS BY DESTINATION AND MODE OF TRANSPORT - 2013

	Mode of transport	$ millions	% of region	% of total high tech exports
United States	Land	389.1	61.5	37.7
	Sea	0.3	0.0	0.0
	Air	243.2	38.4	23.6
	Total	**632.5**	**100.0**	**61.3**
All Other Countries	Land	14.8	3.7	1.4
	Sea	58.2	14.6	5.6
	Air	326.8	81.7	31.7
	Total	**399.8**	**100.0**	**38.7**
Total	Land	403.8	39.1	39.1
	Sea	58.5	5.7	5.7
	Air	570.0	55.2	55.2
	Total	**1,032.3**	**100.0**	**100.0**

While there is some year-to-year variation in the mode of transport of B.C.'s high tech goods as a result of changes in both the types of goods shipped and the intended destination of those goods, the mode used is generally split between shipping over land or by air. However, the proportion of goods shipped by sea has been climbing in recent years, although with the exception of a one-time jump in 2008, when almost 10% of B.C.'s high tech exports were shipped by sea, the share of high tech goods that travel by boat has been restricted to less than 6%. The 2008 anomaly was due to a one-time

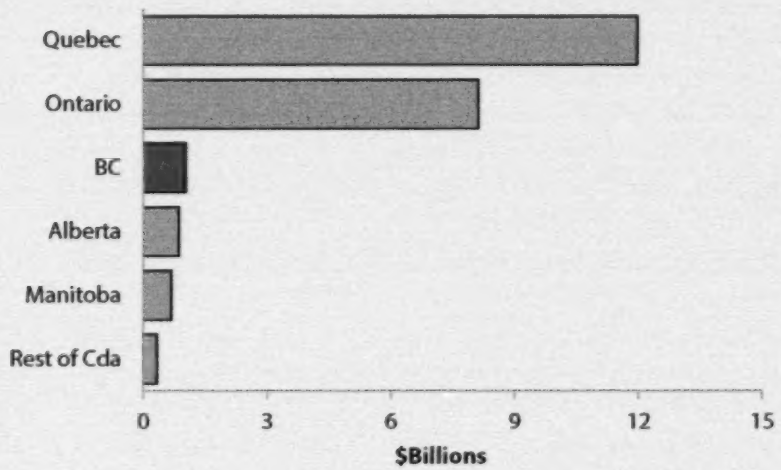
[16] Note that the shipments by land to destinations other than the United States are not all destined for Mexico. Goods destined for overseas destinations may leave B.C. by truck or rail to points of departure in the United States where they are loaded onto ships or planes for the remainder of their journey.

shipment of semiconductor products to the European Union. With the focus of B.C.'s high technology exports shifting away from the United States, the main mode of transport has moved from road and rail to airfreight. In 2013, over 55% of B.C.'s high tech exports were transported by airfreight, with 39% moved over land by road or rail and just under 6% transported by sea.

3.6.6. B.C. ranks third in the country in terms of high tech exports

Compared to Canada's manufacturing hubs of Quebec and Ontario, the value of British Columbia's exports of high technology goods is relatively small. Given the relative size of their economies, one would expect B.C. to lag behind these two provinces; however, even taking that into account, the slightly greater than $1 billion in exports of high tech goods from B.C. in 2013 was still comparatively modest.

FIGURE 14: EXPORTS OF HIGH TECHNOLOGY GOODS BY PROVINCE, 2013



B.C.'s exports of high tech goods are relatively small

With just shy of $12 billion worth of high tech products shipped to international destinations, Quebec led all provinces in exports of high technology goods in 2013, with the province's world-class aerospace industry being the source of the bulk of these goods (78%). High technology products make up a far greater share of Quebec's overall commodity exports compared to other provinces, comprising around 19% of the province's goods exports in 2013, compared to the national average of 5%.

In 2013, Ontario ranked second behind Quebec in terms of high tech exports, shipping $8.1 billion worth of high tech goods. Combined, these two provinces were the source of 87% of Canada's high technology commodity exports.

Although only 3% of B.C.'s overall commodity exports consisted of high tech goods, the $1 billion worth of goods shipped from the province was enough to rank B.C. third in the country. Prior to 2008, British Columbia had almost always trailed behind Alberta (with the exception of 1993), but three consecutive years of double-digit declines from 2007 to 2009 almost halved the value of Alberta's high tech exports and, until 2013, growth since then was slower than that in British Columbia. However, in 2013, Alberta's high tech exports surged 21.7%. Nevertheless, the just under $0.9 billion in high tech exports from Alberta in 2013 is still just a fraction of the peak of $4.4 billion achieved in 2000 when a substantial boost in computer equipment exported to the United States inflated the value of shipments, before falling to $2.4 billion the next year in the throes of the high tech meltdown. At one point, in 2009, Alberta actually fell behind Manitoba, to rank fifth in the country, but Manitoba has since slipped back to fifth in exports of high tech goods.

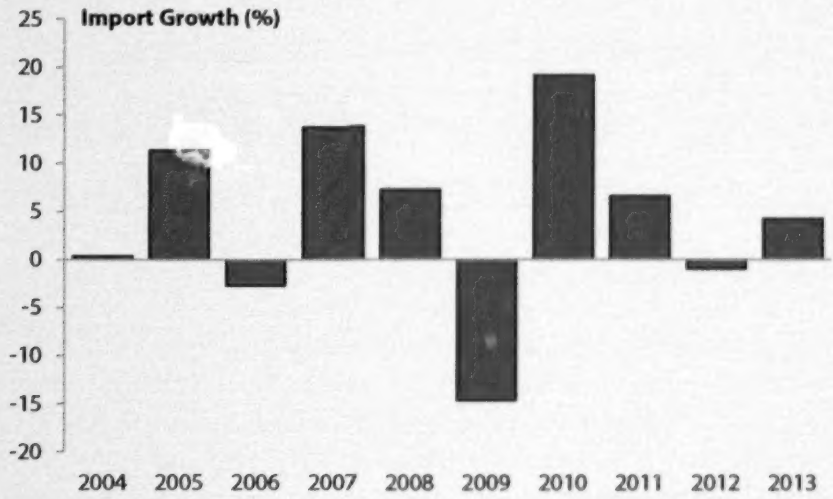
Saskatchewan exports very few high tech goods, with only $28.0 million worth of high tech commodities exported from that province in 2013. Prior to the bursting of the high tech bubble over a decade ago, Saskatchewan would consistently export over $100 million worth of high tech goods, but since then the province usually ships between $20 to $30 million worth of high tech goods to international destinations.

In terms of growth, British Columbia performed better than the national average in 2013, with its 3.7% jump in high tech goods exports, compared to 2.8% for the country as a whole. Alberta's 21.7% growth was the largest jump in shipments, but Quebec also fared well, seeing high tech goods exports rise 12.7%. Saskatchewan (-26.4%) and Ontario (-7.7%) both saw shipments decline significantly, while Manitoba experienced reasonably strong growth of 5.6%.

3.6.7. Imports of high technology goods climbed in 2013

In 2013, imports of high technology goods into British Columbia grew 4.2%, rebounding from a slight decline the previous year. The $5.6 billion in high tech goods imported into the province in 2013 was the highest value ever recorded.

FIGURE 15: GROWTH IN B.C. IMPORTS OF HIGH TECHNOLOGY GOODS



Imports of high technology products into B.C. rebounded in 2013

The value of imports from Mainland China dipped 1.5% in 2013, but China remains the top source for high tech goods for B.C. with $1.7 billion worth of high tech commodities imported into B.C. from China. The United States was the top source of imported high tech goods until 2010, when China took over. Nevertheless, imports from the U.S. climbed 2.4% in 2013 and were valued at $1.5 billion. Together, Mainland China and the U.S. were responsible for 57% of all the high tech goods imported into the province.

Despite the decline in imports from Mainland China as well as falling shipments from Japan (-7.8%) and Hong Kong (-20.4%), high tech commodity imports from the Pacific Rim as a whole climbed 2.7% in 2013. A more than doubling of goods imported from South Korea was responsible for most of this increase. The recent free trade deal negotiated with South Korea may have helped boost imports.

There was strong growth of 9.4% in high tech imports from the European Union, with particularly strong growth in shipments from Italy (+22.5%), Germany (+16.0%) and the Netherlands (+8.7%).

In 2013, imports of high tech products from Mexico into British Columbia increased 5.6%. Mexico was the third largest source of high tech commodity imports into British Columbia, accounting for just over 10% of B.C.'s high tech goods imports in 2013.

3.6.8. Import growth varied by type of high tech product

As with exports, computer and telecommunications goods are by far the largest category of high technology imports. In 2013, B.C. imported almost $3.2 billion worth of these goods, representing 57% of total high tech product imports. Imports of second-ranked life sciences products were well behind at around $0.7 billion, or 13% of high tech goods imported into the province.

TABLE A7: B.C. HIGH TECHNOLOGY IMPORTS BY COMMODITY GROUP – 2013

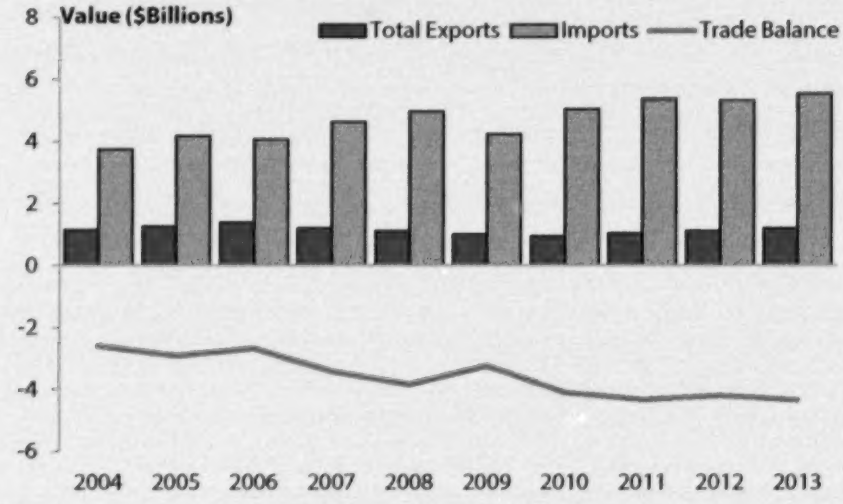
	$ millions	% change 2012/2013
Computers and Telecommunications	3,173.7	1.6
Life Sciences	729.8	0.4
Aerospace	547.6	17.3
Electronics	374.1	20.2
Opto-Electronics	263.3	-5.9
Biotechnology	215.7	31.4
Computer Integrated Manufacturing	189.9	-4.3
Material Design	39.2	3.2
Weapons and Nuclear	21.9	-1.0
Total	**5,555.1**	**4.2**

There was a wide variation in import growth depending on the type of commodity. The largest increase in the value of high tech imports into B.C. was for biotechnology products, at 31.4%. In terms of absolute numbers, imports of aerospace products had the largest growth in value, increasing by $80.8 million, or 17.3%. The largest decline, both in percentage and value, was for imports of opto-electronics, a drop of $16.6 million, or 5.9%.

3.6.9. B.C.'s high tech trade deficit was larger in 2013

British Columbia imports far more high technology goods than it exports and, as a result, the province runs a substantial trade deficit in these commodities. In 2013, this trade gap widened slightly as exports grew marginally slower than imports. The deficit increased to $4.3 billion, or more than four times the total value of B.C.'s high tech exports. In 2013, the value of high technology goods imported into British Columbia was over five times that of high tech exports from the province.

FIGURE 16: B.C. HIGH TECHNOLOGY BALANCE OF TRADE IN GOODS



B.C. imports far more high tech goods than it exports

The growth in B.C.'s high tech exports to Mainland China has not kept pace with the phenomenal increase in imports from that country and, as a result, B.C.'s high tech goods trade deficit with China has climbed to just under $1.7 billion, making it British Columbia's largest high tech trade deficit. The next largest deficit in trade in high tech goods is with the United States, at almost $0.9 billion, followed by Mexico, at just under $0.6 billion, which exceeds the combined deficit with all countries of the European Union ($0.4 billion). B.C. exports very few high tech goods to Mexico, but imports a large amount, accounting for the substantial deficit.

TABLE A8: B.C. BALANCE OF TRADE IN HIGH TECH GOODS BY COMMODITY GROUP – 2013

	$ millions
Weapons and Nuclear	-18.9
Material Design	-35.3
Computer Integrated Manufacturing	-78.1
Aerospace	-144.1
Biotechnology	-211.8
Opto-Electronics	-219.2
Electronics	-347.2
Life Sciences	-549.2
Computers and Telecommunications	-2,736.5
Total	**-4,340.3**

The trade deficit spans across all commodity groups. As one might expect, the largest deficits are for goods with the highest volumes of trade. The trade deficit for computers and telecommunications alone is two and a half times the value of all B.C. high tech commodity exports combined.

3.6.10. The United States exports and imports relatively more high technology goods than Canada

High technology products are a much more significant portion of overall commodity trade in the United States compared to Canada. In 2013, the United States exported $244.3 billion worth of high tech commodities,[17] which represented over 17% of total U.S. domestic exports (compared to just over 5% for Canada and slightly more than 3% for British Columbia). Among the provinces, only Quebec, at 18%, has a comparable ratio of high tech to overall goods exports.

High tech products also make up a larger share of total imports into the United States, although the difference is much smaller. In 2013, almost 18% of imports into the United States consisted of high technology goods, compared to slightly less than 12% of imports into Canada.

The value of American domestic exports of high technology goods jumped 8.1% in 2013, while imports climbed 4.3% to $413.2 billion. As recently as 1997, the United States had a surplus in trade of high tech goods exceeding $45 billion, but strong growth in imports, particularly from Mainland China, coupled with much smaller increases in exports has put American trade in high technology goods into a growing deficit position over the last dozen years. This deficit peaked at $97.7 billion in 2011, before falling to $83.7 billion in 2013.[18] The U.S. high tech trade deficit with China alone was $120.4 billion in 2013. The next largest deficit was with Ireland, at $17.3 billion. At the other end of the scale, the United States' largest surplus in trade of high technology goods was with Canada, at $16.1 billion.

3.7. Service Exports

3.7.1. Exports of high tech services grew in 2013

Exports of services are defined as all services provided by B.C. residents to non-residents. For example, service exports take place when B.C.-based professionals, such as engineers or software programmers, work for a period of time outside the province. Service exports

[17] All figures for U.S. trade are denominated in Canadian dollars and growth rates are calculated using these figures.

[18] Note that the balance of trade is calculated by taking the difference of total exports (including re-exports) and subtracting imports. The $244.3 billion export figure for 2013 excludes re-exports, which were $85.2 billion.

also occur when, for example, an engineering firm produces a study in its B.C. office for an overseas client or when a software developer creates a new program that is delivered on-line to a client in another country.

It is generally more difficult to measure service exports, compared to exports of goods. Whereas goods exports are tracked through customs documents, providing an administrative record that can be used for statistical purposes, this is not usually the case with regard to service exports. Rather, service exports have to be estimated using surveys and other available information.

B.C.'s exports of high tech services increased in 2013, rising by 3.6%, almost the same rate of growth of high tech goods.[19] The largest category of high tech services—professional, scientific and technical services—saw growth of 3.8%, while exports of computer-related services also increased, rising 1.6%. However, the strongest growth was in exports of all other high technology services, which climbed 6.8%.

TABLE A9: B.C. HIGH TECHNOLOGY SERVICE EXPORTS – 2013

	$ millions	% change 2012/2013
Computer-Related Services	1,225	1.6
Professional, Scientific and Technical Services	1,483	3.8
Other Services	707	6.8
Total	**3,416**	**3.6**

The high technology sector in British Columbia exports far more services than goods. In 2013, services represented three-quarters of B.C.'s total high technology exports (i.e., goods plus services).

[19] Note that efforts to improve the methodology to measure service exports has been ongoing and as a result, there have been significant changes to previously published figures over the last few editions of this report.

4. Conclusion

4.1. B.C.'s high technology sector is small, but growing

British Columbia's high technology sector continues to grow and is playing an increasingly important role in the provincial economy; however, compared to other jurisdictions, particularly American states, British Columbia's high technology sector is still relatively small. Nevertheless, while the sector as a whole may not rank prominently compared to other high tech jurisdictions, B.C. is home to high tech clusters, such as digital media and biotechnology, which are positioned among the best in the world. As a testament to the importance of the sector to the province, high technology industries in B.C. employ more people than the province's traditional economic powerhouses, the forestry and mining industries, combined.

B.C.'s high tech sector continues to face challenges, such as a smaller domestic marketplace and an often tight labour market, which may give B.C. companies a competitive disadvantage, particularly with many of their American counterparts, but also with high tech firms in central Canada. Nevertheless, given the significance of high technology products in today's world and the combination of lucrative revenues and well-paid employment high tech industries offer, there is little doubt that high technology will remain a priority sector.

5. Detailed Tables

The tables in this section include a notation of "r" to indicate data that have been revised from previous editions and "p" to indicate that the data are preliminary. Most data for 2013 are denoted as preliminary, which should not be construed to mean there are problems with the data, but rather that they are based on information that itself is preliminary and therefore subject to greater revision than data for previous years.

Note that the tables are available in electronic form on the BC Stats website: http://www.bcstats.gov.bc.ca/StatisticsBySubject/BusinessIndustry/HighTechnology.aspx

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TABLE 1. BRITISH COLUMBIA GROSS DOMESTIC PRODUCT (GDP) (CONSTANT DOLLAR) AT BASIC PRICES, BY INDUSTRY

	Chained 2007 $ million[1]										
INDUSTRY	**2003**	**2004**	**2005**	**2006**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing	**1,095**	**1,156**	**1,232**	**1,295**	**1,288**	**1,294**	**1,182**	**1,395**	**1,389**	**1,452**	**1,579**
Services	**8,159**	**8,441**	**9,123**	**9,567**	**10,378**	**10,621**	**10,356**	**10,574**	**11,055**	**11,409**	**11,566**
Telecommunications and Film[2]	4,017	3,864	4,138	x	x	x	4,526	4,605	4,647	4,709	4,759
Engineering services	1,570	1,566	1,682	1,865	2,092	2,254	2,170	2,118	2,334	2,568	2,644
Computer and related services	1,916	2,182	2,375	2,563	2,671	2,710	2,527	2,607	2,827	2,851	2,868
Other services	686	832	930	x	x	x	1,145	1,242	1,240	1,287	1,306
High Technology Sector Total	**9615.8**	**9632.7**	**10387.7**	**10926.4**	**11,665**	**11,800**	**11,522**	**11,536**	**11,898**	**12,261**	**12,526**
BC Industrial Aggregate	**156,309**	**162,546**	**170,241**	**176,774**	**181,571**	**183,334**	**178,610**	**184,509**	**189,599**	**194,265**	**198,278**

	% change from previous year									
INDUSTRY	**2004**	**2005**	**2006**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing	**5.6**	**6.6**	**5.1**	**-0.6**	**-0.3**	**-7.9**	**18.0**	**-0.4**	**4.5**	**8.8**
Services	**3.5**	**8.1**	**4.9**	**8.5**	**2.3**	**-2.5**	**2.1**	**4.6**	**3.2**	**1.4**
Telecommunications and Film[2]	-3.8	7.1	*	*	*	*	1.7	0.9	1.3	1.1
Engineering services	-0.3	7.4	10.9	12.2	7.7	-3.7	-2.4	10.2	10.0	3.0
Computer and related services	13.9	8.8	7.9	4.2	1.5	-6.8	3.1	8.5	0.8	0.6
Other services	21.2	11.8	*	*	*	*	8.5	-0.1	3.8	1.4
High Technology Sector Total	**0.2**	**7.8**	**5.2**	**6.8**	**1.2**	**-2.4**	**0.1**	**3.1**	**3.0**	**2.2**
BC Industrial Aggregate	**4.0**	**4.7**	**3.8**	**2.7**	**1.0**	**-2.6**	**3.3**	**2.8**	**2.5**	**2.1**

1. Note that for chained data, the aggregates are not equal to the sum of their components and, therefore, the sum of the industries will not necessarily equal the "all industries" total.
2. The telecommunications and motion picture production and post-production industries have been combined due to confidentiality requirements.
x denotes data suppressed due to confidentiality requirements
[p] Preliminary
Source: BC Stats and Statistics Canada

TABLE 2. BRITISH COLUMBIA GROSS DOMESTIC PRODUCT (GDP) (CURRENT DOLLAR) AT BASIC PRICES, BY INDUSTRY

	$ million										
INDUSTRY	**2003[r]**	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing	**983**	**1,012**	**1,081**	**1,212**	**1,288**	**1,185**	**1,127**	**1,225**	**1,296**	**1,485**	**1,622**
Services	**7,516**	**8,018**	**8,626**	**9,062**	**10,378**	**10,695**	**10,474**	**10,730**	**11,494**	**11,832**	**12,298**
Telecommunications and Film[1]	3,589	3,625	3,847	x	x	x	4,445	4,560	4,697	4,627	4,717
Engineering services	1,292	1,389	1,572	1,767	2,092	2,138	1,933	1,975	2,286	2,486	2,705
Computer and related services	2,043	2,257	2,342	2,402	2,671	2,753	2,952	2,914	3,188	3,308	3,406
Other services	593	747	865	x	x	x	1,145	1,281	1,323	1,411	1,471
High Technology Sector Total	**8,499**	**9,030**	**9,708**	**10,273**	**11,665**	**11,879**	**11,602**	**11,955**	**12,790**	**13,297**	**13,920**
BC Industrial Aggregate	**135,520**	**147,743**	**159,582**	**172,058**	**181,571**	**189,418**	**181,675**	**191,090**	**201,922**	**206,663**	**213,343**
High Technology as a % of Total	**6.3**	**6.1**	**6.1**	**6.0**	**6.4**	**6.3**	**6.4**	**6.3**	**6.3**	**6.4**	**6.5**

	% change from previous year									
INDUSTRY	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing	**3.0**	**6.8**	**12.0**	**6.3**	**-8.0**	**-4.9**	**8.6**	**5.8**	**13.0**	**10.7**
Services	**6.7**	**7.6**	**5.0**	**14.5**	**3.1**	**-2.1**	**2.4**	**7.1**	**2.9**	**3.9**
Telecommunications and Film[1]	1.0	6.1	*	*	*	*	2.6	3.0	-1.5	1.9
Engineering services	7.5	13.2	12.4	18.4	2.2	-9.6	2.2	15.7	8.8	8.8
Computer and related services	10.4	3.8	2.6	11.2	3.1	7.2	-1.3	9.4	3.8	3.0
Other services	26.1	15.7	*	*	*	*	11.9	3.3	6.7	4.2
High Technology Sector Total	**6.3**	**7.5**	**5.8**	**13.6**	**1.8**	**-2.3**	**3.0**	**7.0**	**4.0**	**4.7**
BC Industrial Aggregate	**9.0**	**8.0**	**7.8**	**5.5**	**4.3**	**-4.1**	**5.2**	**5.7**	**2.3**	**3.2**

1. The telecommunications and motion picture production and post-production industries have been combined due to confidentiality requirements.
x denotes data suppressed due to confidentiality requirements[r] Revised
[p] Preliminary
Source: BC Stats and Statistics Canada

TABLE 3. BRITISH COLUMBIA GROSS DOMESTIC PRODUCT (GDP) AT BASIC PRICES, SELECTED ACTIVITIES

	Chained 2007 $ million[1]										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Goods-producing industries	**40,753**	**43,169**	**45,761**	**46,917**	**46,855**	**46,573**	**42,230**	**44,804**	**46,644**	**48,838**	**49,565**
Agriculture, forestry, fishing and hunting	3,822	4,119	4,127	4,066	3,927	3,605	3,035	3,391	3,647	3,642	3,788
Crop and animal production	1,009	1,015	1,021	1,030	1,084	1,085	1,085	1,086	1,121	1,156	1,184
Forestry and logging	1,931	2,187	2,168	2,113	1,998	1,776	1,212	1,509	1,683	1,697	1,801
Fishing, hunting and trapping	163	187	182	204	159	137	144	166	156	130	117
Support activities for agriculture and forestry	739	714	757	727	685	608	604	635	697	665	693
Mining, oil and gas extraction	9,431	9,375	10,184	10,195	9,727	10,014	8,853	10,196	11,049	11,046	11,721
Utilities	3,328	3,296	3,783	3,370	3,827	3,855	3,690	3,691	3,999	4,030	3,894
Construction	10,451	11,580	12,240	13,477	13,722	14,573	13,961	14,339	14,289	15,832	15,988
Manufacturing	13,625	14,553	15,242	15,722	15,653	14,465	12,586	13,303	13,687	14,294	14,295
Non-durable manufacturing	5,707	5,715	5,804	5,834	5,832	5,728	5,167	5,366	5,308	5,345	5,202
Durable manufacturing	7,957	8,862	9,442	9,888	9,821	8,720	7,377	7,910	8,384	8,984	9,148
Service-producing industries	**115,163**	**119,312**	**124,385**	**129,792**	**134,716**	**136,782**	**136,391**	**139,722**	**143,073**	**145,588**	**148,857**
Wholesale trade	6,682	6,867	7,120	7,450	8,000	7,858	7,188	7,734	8,091	8,458	8,819
Retail trade	8,593	9,057	9,596	10,366	10,895	10,800	10,581	11,002	11,032	11,181	11,383
Transportation and warehousing	8,661	8,993	9,803	9,998	10,022	9,958	9,812	10,098	10,387	10,624	10,786
Information and cultural services	6,093	6,304	6,699	6,854	6,987	7,082	6,765	6,797	6,896	7,016	7,050
Finance and insurance	8,515	9,317	9,615	10,405	10,803	10,622	10,429	10,921	11,258	11,406	11,819
Real estate and rental and leasing	24,140	25,229	26,499	27,399	28,657	29,333	30,421	31,383	32,593	33,485	34,737
Professional, scientific and technical services	7,701	8,094	8,541	9,343	10,046	10,424	9,827	9,876	10,371	10,618	10,733
Management of companies and enterprises	1,231	1,261	1,245	1,290	1,304	1,389	1,341	1,297	1,289	1,315	1,342
Administration and support, waste mgmt.	3,467	3,773	4,193	4,393	4,633	4,645	4,437	4,422	4,292	4,313	4,371
Education	8,481	8,659	8,978	9,191	9,502	9,935	9,983	10,252	10,411	10,602	10,760
Health care and social assistance	11,865	11,417	11,327	11,685	11,879	12,331	12,625	12,714	13,065	13,278	13,474
Arts, entertainment and recreation	1,634	1,693	1,681	1,778	1,848	1,813	1,860	1,894	1,842	1,822	1,902
Accommodation and food services	4,703	4,901	5,014	5,125	5,241	5,188	5,205	5,256	5,189	5,214	5,421
Other services	3,700	3,788	3,954	4,127	4,214	4,285	4,231	4,127	4,226	4,225	4,332
Public administration	9,929	9,940	10,032	10,340	10,686	11,129	11,616	11,899	12,086	12,008	11,921
GDP at basic prices	**156,309**	**162,546**	**170,241**	**176,774**	**181,571**	**183,334**	**178,610**	**184,509**	**189,599**	**194,265**	**198,279**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Goods-producing industries	**5.9**	**6.0**	**2.5**	**-0.1**	**-0.6**	**-9.3**	**6.3**	**3.9**	**4.7**	**1.5**	
Agriculture, forestry, fishing and hunting	7.8	0.2	-1.5	-3.4	-8.2	-15.8	11.7	7.6	-0.1	4.0	
Crop and animal production	0.5	0.6	0.9	5.2	0.1	0.0	0.1	3.2	3.1	2.4	
Forestry and logging	13.3	-0.9	-2.5	-5.4	-11.1	-31.7	24.5	11.6	0.8	6.1	
Fishing, hunting and trapping	15.0	-2.6	12.2	-22.2	-13.7	4.9	15.2	-6.2	-16.3	-10.4	
Support activities for agriculture and forestry	-3.3	6.0	-4.0	-5.7	-11.2	-0.7	5.0	9.8	-4.6	4.3	
Mining, oil and gas extraction	-0.6	8.6	0.1	-4.6	3.0	-11.6	15.2	8.4	0.0	6.1	
Utilities	-1.0	14.7	-10.9	13.6	0.7	-4.3	0.0	8.4	0.8	-3.4	
Construction	10.8	5.7	10.1	1.8	6.2	-4.2	2.7	-0.4	10.8	1.0	
Manufacturing	6.8	4.7	3.1	-0.4	-7.6	-13.0	5.7	2.9	4.4	0.0	
Non-durable manufacturing	0.1	1.6	0.5	0.0	-1.8	-9.8	3.9	-1.1	0.7	-2.7	
Durable manufacturing	11.4	6.6	4.7	-0.7	-11.2	-15.4	7.2	6.0	7.2	1.8	
Service-producing industries	**3.6**	**4.3**	**4.3**	**3.8**	**1.5**	**-0.3**	**2.4**	**2.4**	**1.8**	**2.2**	
Wholesale trade	2.8	3.7	4.6	7.4	-1.8	-8.5	7.6	4.6	4.5	4.3	
Retail trade	5.4	5.9	8.0	5.1	-0.9	-2.0	4.0	0.3	1.3	1.8	
Transportation and warehousing	3.8	9.0	2.0	0.2	-0.6	-1.5	2.9	2.9	2.3	1.5	
Information and cultural services	3.5	6.3	2.3	1.9	1.1	-4.2	0.5	1.5	1.7	0.5	
Finance and insurance	9.4	3.2	8.2	3.8	-1.7	-1.8	4.7	3.1	1.3	3.6	
Real estate and rental and leasing	4.5	5.0	3.4	4.6	2.4	3.7	3.2	3.9	2.7	3.7	
Professional, scientific and technical services	5.1	5.5	9.4	7.5	3.8	-5.7	0.5	5.0	2.4	1.1	
Management of companies and enterprises	2.4	-1.3	3.6	1.0	6.5	-3.5	-3.3	-0.6	2.0	2.1	
Administration and support, waste mgmt.	8.8	11.1	4.8	5.5	0.3	-4.5	-0.3	-2.9	0.5	1.3	
Education	2.1	3.7	2.4	3.4	4.6	0.5	2.7	1.6	1.8	1.5	
Health care and social assistance	-3.8	-0.8	3.2	1.7	3.8	2.4	0.7	2.8	1.6	1.5	
Arts, entertainment and recreation	3.6	-0.7	5.8	3.9	-1.9	2.6	1.8	-2.7	-1.1	4.4	
Accommodation and food services	4.2	2.3	2.2	2.3	-1.0	0.3	1.0	-1.3	0.5	4.0	
Other services	2.4	4.4	4.4	2.1	1.7	-1.3	-2.4	2.4	0.0	2.5	
Public administration	0.1	0.9	3.1	3.3	4.1	4.4	2.4	1.6	-0.6	-0.7	
GDP at basic prices	**4.0**	**4.7**	**3.8**	**2.7**	**1.0**	**-2.6**	**3.3**	**2.8**	**2.5**	**2.1**	

1. Note that for chained data, the aggregates are not equal to the sum of their components and, therefore, the sum of the industries will not necessarily equal the "all industries" total.

Source: Statistics Canada

TABLE 4. HIGH TECHNOLOGY GDP (CONSTANT DOLLAR) AT BASIC PRICES, BY PROVINCE

Chained 2007 $ million[1]

Province		2003	2004	2005	2006	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Canada	Manufacturing	23,358	23,846	24,422	25,236	24,211	25,139	23,468	23,343	22,901	21,958	21,487
	Services	65,079	66,301	69,585	73,073	75,364	78,380	76,009	78,163	81,352	83,817	84,952
	Total	90,626	91,792	93,304	97,938	99,575	102,124	98,263	99,837	101,913	105,337	106,456
British Columbia	Manufacturing	1,095	1,156	1,232	1,295	1,288	1,284	1,182	1,395	1,389	1,452	1,579
	Services	8,159	8,441	9,123	9,567	10,378	10,621	10,356	10,574	11,055	11,400	11,566
	Total	9,616	9,633	10,388	10,926	11,665	11,800	11,522	11,536	11,898	12,261	12,526
Alberta	Manufacturing	1,215	1,064	974	939	903	895	774	671	724	942	1,087
	Services	9,797	10,832	11,095	12,191	12,690	12,658	13,052	13,337	14,294	14,978	15,462
	Total	10,805	11,971	12,132	13,028	13,593	13,544	13,836	14,076	16,259	17,178	17,658
Saskatchewan	Manufacturing	145	152	161	184	222	236	234	223	211	214	184
	Services	1,192	1,179	1,282	1,324	1,338	2,269	2,136	2,288	2,833	2,526	2,653
	Total	1,340	1,333	1,435	1,499	1,560	2,400	2,247	2,511	3,024	2,707	2,789
Manitoba	Manufacturing	719	646	639	676	708	778	746	728	736	755	720
	Services	1,341	1,420	1,452	1,280	1,142	1,747	1,708	1,835	1,894	1,990	1,966
	Total	2,546	2,457	2,086	2,047	1,850	2,724	2,354	2,463	2,868	2,696	2,587
Ontario	Manufacturing	10,619	11,399	11,685	12,509	11,584	12,158	11,650	11,382	11,180	10,131	9,449
	Services	27,685	28,635	30,018	30,021	30,761	31,776	32,114	32,697	34,519	35,570	36,661
	Total	39,604	40,604	41,554	42,231	42,345	42,974	42,990	42,630	44,199	45,726	45,826
Quebec	Manufacturing	9,697	9,423	9,713	9,585	8,960	9,285	8,377	8,634	8,458	8,313	8,343
	Services	12,873	13,167	13,695	14,296	14,290	15,257	15,761	15,894	16,892	16,977	17,124
	Total	21,591	21,913	22,475	23,168	23,250	24,399	23,490	24,244	25,499	24,419	24,879

% change from previous year

Province		2004	2005	2006	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Canada	Manufacturing	2.1	2.4	3.3	-4.1	3.8	-6.6	-0.5	-1.9	-4.1	-2.1
	Services	1.9	4.9	5.0	3.1	4.0	-3.0	2.8	4.1	3.0	1.4
	Total	1.3	1.6	5.0	1.7	2.6	-3.8	1.6	2.1	3.4	1.1
British Columbia	Manufacturing	5.6	6.6	5.1	-0.6	-0.3	-7.9	18.0	-0.4	4.5	8.8
	Services	3.5	8.1	4.9	8.5	2.3	-2.5	2.1	4.6	3.2	1.4
	Total	0.2	7.8	5.2	6.8	1.2	-2.4	0.1	3.1	3.0	2.2
Alberta	Manufacturing	-12.4	-8.4	-3.7	-3.7	-0.9	-13.6	-13.3	7.9	30.1	6.9
	Services	10.6	2.4	9.9	4.1	-0.3	3.1	2.2	7.2	4.8	2.8
	Total	10.8	1.3	7.4	4.3	-0.4	2.2	1.7	15.5	5.7	2.8
Saskatchewan	Manufacturing	4.8	6.1	14.3	20.6	6.4	-0.8	-4.7	-5.3	1.6	-14.3
	Services	-1.1	8.7	3.3	1.1	69.5	-5.9	8.1	23.7	-10.8	5.0
	Total	-0.5	7.6	4.5	4.1	59.7	-5.8	7.0	20.4	-10.5	3.0
Manitoba	Manufacturing	-10.2	-1.1	5.8	4.8	9.8	-4.1	-2.3	1.1	2.5	-4.6
	Services	5.9	2.3	-11.9	-10.8	53.0	-2.2	7.4	2.6	5.6	-1.2
	Total	-3.5	-15.1	-1.8	-9.6	47.3	-13.6	4.6	8.4	1.0	-4.0
Ontario	Manufacturing	7.3	1.8	7.8	-7.4	5.0	-4.2	-2.3	-1.8	-9.4	-6.7
	Services	3.4	4.8	0.0	2.5	3.3	1.1	1.8	5.6	3.0	3.1
	Total	2.5	2.3	1.6	0.3	1.5	0.0	-0.8	3.7	3.5	0.2
Quebec	Manufacturing	-2.8	3.1	-2.1	-5.7	3.6	-9.8	3.1	-2.0	-1.7	0.4
	Services	2.3	4.0	4.4	0.0	6.8	3.3	0.8	6.3	0.5	0.9
	Total	1.5	2.6	3.1	0.4	4.9	-3.7	3.2	5.2	-4.2	1.9

1. Note that for chained data, the aggregates are not equal to the sum of their components and, therefore, the sum of the industries will not necessarily equal the "all industries" total.

p Preliminary

Source: BC Stats

TABLE 5. HIGH TECHNOLOGY GDP (CURRENT DOLLAR) AT BASIC PRICES, BY PROVINCE AND THE UNITED STATES

Cdn $ million

Region		2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Canada	Manufacturing	21,615	22,117	22,628	24,099	24,211	24,973	24,537	24,859	24,586	25,825	26,411
	Services	57,811	61,556	65,903	68,845	75,364	79,528	81,378	85,578	92,214	97,070	98,597
	Total	79,426	83,672	88,531	92,943	99,575	104,501	105,915	110,437	116,800	122,895	125,008
British Columbia	Manufacturing	983	1,012	1,081	1,212	1,288	1,185	1,127	1,225	1,296	1,465	1,622
	Services	7,516	8,018	8,626	9,062	10,378	10,095	10,474	10,730	11,494	11,832	12,298
	Total	8,499	9,030	9,708	10,273	11,665	11,879	11,602	11,955	12,790	13,297	13,920
Alberta	Manufacturing	709	926	931	780	903	922	844	816	931	1,297	1,406
	Services	8,515	9,681	10,438	11,532	12,690	12,767	13,534	14,012	15,536	17,251	17,860
	Total	9,283	10,607	11,369	12,311	13,593	13,688	14,368	14,828	16,467	18,548	19,266
Saskatchewan	Manufacturing	133	142.2	152.8	179.2	222	223	215	198	182	196	153
	Services	1074.5	1079.8	1219.3	1347.9	1,338	2,332	2,225	2,506	3,121	2,966	2,985
	Total	1207.5	1221.9	1372.1	1427.2	1,560	2,555	2,440	2,703	3,303	3,163	3,137
Manitoba	Manufacturing	660	630	551	645	708	763	700	732	757	767	751
	Services	897	984	1,026	1,063	1,142	1,681	1,707	1,819	2,000	2,178	2,222
	Total	1,558	1,614	1,577	1,708	1,850	2,445	2,407	2,550	2,757	2,945	2,973
Ontario	Manufacturing	9,636	10,059	10,326	11,782	11,584	11,658	11,954	11,487	11,392	11,464	11,122
	Services	25,203	26,556	28,100	28,605	30,761	32,130	33,809	35,936	38,105	39,203	40,333
	Total	34,839	36,614	38,516	40,388	42,345	43,797	45,763	47,423	49,497	50,667	51,455
Quebec	Manufacturing	8,946	8,889	9,088	9,017	8,960	9,568	8,934	9,612	9,267	9,790	10,541
	Services	11,172	11,600	12,516	13,088	14,290	15,253	16,629	17,495	19,075	20,418	20,796
	Total	20,118	20,489	21,604	22,105	23,250	24,822	25,562	27,107	28,341	30,208	31,337
United States[1]	Manufacturing	568,716	541,910	529,207	540,900	539,666	546,990	610,896	567,666	546,116	581,129	584,401
	Services	1,059,121	1,064,280	1,041,467	1,026,132	1,050,571	1,117,368	1,170,364	1,090,999	1,097,946	1,160,641	1,186,024
	Total	1,627,837	1,606,190	1,570,675	1,567,032	1,590,237	1,664,358	1,781,260	1,658,666	1,644,061	1,741,770	1,770,425

% change from previous year

Region		2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Canada	Manufacturing	2.3	2.3	6.5	0.5	3.1	-1.7	1.3	-1.1	5.0	2.3
	Services	6.5	7.1	4.5	9.5	5.5	2.3	5.2	7.8	5.3	1.6
	Total	5.3	5.8	5.0	7.1	4.9	1.4	4.3	5.8	5.2	1.7
British Columbia	Manufacturing	3.0	6.8	12.0	6.3	-8.0	-4.9	8.6	5.8	13.0	10.7
	Services	6.7	7.6	5.0	14.5	3.1	-2.1	2.4	7.1	2.9	3.9
	Total	6.3	7.5	5.8	13.6	1.8	-2.3	3.0	7.0	4.0	4.7
Alberta	Manufacturing	30.5	0.5	-16.3	15.9	2.0	-8.4	-3.2	14.0	39.3	8.4
	Services	13.7	7.8	10.5	10.0	0.6	5.9	3.6	10.9	11.0	3.5
	Total	14.3	7.2	8.3	10.4	0.7	5.0	3.2	11.1	12.6	3.9
Saskatchewan	Manufacturing	6.9	7.5	17.3	23.7	0.7	-3.9	-7.9	-8.1	8.2	-22.3
	Services	0.5	12.9	2.3	7.2	74.2	-4.6	12.6	24.6	-5.0	0.6
	Total	1.2	12.3	4.0	9.3	63.8	-4.5	10.8	22.2	-4.2	-0.8
Manitoba	Manufacturing	-4.6	-12.6	17.1	9.8	7.8	-8.3	4.5	3.4	1.4	-2.1
	Services	9.7	4.3	3.6	7.4	47.2	1.5	6.5	10.0	8.9	2.0
	Total	3.6	-2.3	8.3	8.3	32.1	-1.5	5.9	8.1	6.8	0.9
Ontario	Manufacturing	4.4	2.7	14.1	-1.7	0.6	2.5	-3.9	-0.8	0.6	-3.0
	Services	5.4	6.2	1.5	7.5	4.5	5.2	6.3	6.0	2.9	2.9
	Total	5.1	5.2	4.9	4.8	3.4	4.5	3.6	4.4	2.4	1.6
Quebec	Manufacturing	-0.6	2.2	-0.8	-0.6	6.8	-6.6	7.6	-3.6	5.6	7.7
	Services	3.8	7.9	4.6	9.2	6.7	9.0	5.2	9.0	7.0	1.9
	Total	1.8	5.4	2.3	5.2	6.8	3.0	6.0	4.6	6.6	3.7
United States	Manufacturing	-4.7	-2.3	2.2	-0.2	1.4	11.7	-7.1	-3.8	6.4	0.6
	Services	0.5	-2.1	-1.5	2.4	6.4	4.7	-6.8	0.6	5.7	2.2
	Total	-1.3	-2.2	-0.2	1.5	4.7	7.0	-6.9	-0.9	5.9	1.6

1. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 6. HIGH TECHNOLOGY GDP (CURRENT DOLLAR) FOR SELECTED U.S. STATES[1]

Cdn $ million[2]

State	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012	2013[p]
USA	**1,627,837**	**1,606,190**	**1,570,675**	**1,567,032**	**1,590,237**	**1,664,358**	**1,781,260**	**1,658,666**	**1,644,061**	**1,741,770**	**1,770,425**
California	306,405	301,172	293,357	284,093	290,976	298,220	324,175	312,294	315,327	355,545	356,049
Texas	111,926	112,768	111,992	112,348	105,793	111,227	113,329	104,646	104,147	113,185	117,617
New York	106,805	104,386	102,025	102,181	100,058	106,397	118,787	109,900	106,686	112,924	113,230
Florida	58,679	59,110	58,396	56,593	55,612	55,438	57,506	49,988	48,611	52,340	54,171
Massachusetts	67,649	61,211	58,410	56,756	59,989	59,746	61,527	61,273	59,396	64,398	65,214
Washington	60,522	56,969	61,612	60,893	67,965	69,443	76,534	72,968	74,719	87,392	89,905
Virginia	51,466	52,093	50,417	47,456	46,258	47,337	53,069	49,664	48,677	50,901	53,678
Pennsylvania	66,099	60,311	58,399	54,860	55,634	61,942	69,452	60,298	57,795	59,364	61,753
Illinois	51,466	50,525	48,760	46,917	45,884	46,693	50,384	46,276	46,059	48,885	53,067
New Jersey	64,249	60,815	59,460	64,122	70,235	70,979	73,460	63,766	61,296	64,361	63,131
North Carolina	47,417	39,966	41,302	47,973	46,342	48,933	55,940	49,529	51,685	53,091	61,142
Georgia	43,991	42,345	41,063	39,845	38,607	37,803	38,401	34,896	34,658	39,881	40,877
Ohio	36,352	34,484	33,668	31,628	31,154	32,223	33,282	29,588	30,744	31,625	33,082
Michigan	33,604	29,407	27,127	24,932	24,370	24,445	24,712	23,052	22,543	24,624	25,880
Maryland	36,953	37,648	37,418	36,626	38,407	42,407	47,830	45,251	45,097	46,714	49,896
Colorado	37,433	36,048	36,627	35,634	37,308	38,260	41,165	38,380	38,572	41,385	42,163
Minnesota	26,049	24,635	24,812	22,855	21,799	23,113	24,109	23,744	23,670	24,720	26,761
Arizona	36,847	29,489	26,325	25,718	24,696	24,754	23,765	22,773	22,848	24,716	24,736
Missouri	24,016	22,843	21,496	19,735	19,277	19,999	22,366	22,124	20,529	22,263	20,684
Indiana	30,960	33,845	32,046	30,579	33,408	39,061	44,771	39,808	38,740	40,958	42,516
Other States	328,950	356,119	345,962	365,289	376,466	405,939	426,695	398,446	392,261	382,497	374,873

% change from previous year

State	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012	2013[p]
USA	**-1.3**	**-2.2**	**-0.2**	**1.5**	**4.7**	**7.0**	**-6.9**	**-0.9**	**5.9**	**1.6**
California	-1.7	-2.6	-3.2	2.4	2.5	8.7	-3.7	1.0	12.8	0.1
Texas	0.8	-0.7	0.3	-5.8	5.1	1.9	-7.7	-0.5	8.7	3.9
New York	-2.3	-2.3	0.2	-2.1	6.3	11.6	-7.5	-2.9	5.8	0.3
Florida	0.7	-1.2	-3.1	-1.7	-0.3	3.7	-13.1	-2.8	7.7	3.5
Massachusetts	-9.5	-4.6	-2.8	5.7	-0.4	3.0	-0.4	-3.1	8.4	1.3
Washington	-5.9	8.1	-1.2	11.6	2.2	10.2	-4.7	2.4	17.0	2.9
Virginia	1.2	-3.2	-5.9	-2.5	2.3	12.1	-6.4	-2.0	4.6	5.5
Pennsylvania	-8.8	-3.2	-6.1	1.4	11.3	12.1	-13.2	-4.2	2.7	4.0
Illinois	-1.8	-3.5	-3.8	-2.2	1.8	7.9	-8.2	-0.5	6.1	8.6
New Jersey	-5.3	-2.2	7.8	9.5	1.1	3.5	-13.2	-3.9	5.0	-1.9
North Carolina	-15.7	3.3	16.2	-3.4	5.6	14.3	-11.5	4.4	2.7	15.2
Georgia	-3.7	-3.0	-3.0	-3.1	-2.1	1.6	-9.1	-0.7	15.1	2.5
Ohio	-5.1	-2.4	-6.1	-1.5	3.4	3.3	-11.1	3.9	2.9	4.6
Michigan	-12.5	-7.8	-8.1	-2.3	0.3	1.1	-6.7	-2.2	9.2	5.1
Maryland	1.9	-0.6	-2.1	4.9	10.4	12.8	-5.4	-0.3	3.6	6.8
Colorado	-3.7	1.6	-2.7	4.7	2.6	7.6	-6.8	0.5	7.3	1.9
Minnesota	-5.4	0.7	-7.9	-4.6	6.0	4.3	-1.5	-0.3	4.4	8.3
Arizona	-20.0	-10.7	-2.3	-4.0	0.2	-4.0	-4.2	0.3	8.2	0.1
Missouri	-4.9	-5.9	-8.2	-2.3	3.7	11.8	-1.1	-7.2	8.4	-7.1
Indiana	9.3	-5.3	-4.6	9.3	16.9	14.6	-11.1	-2.7	5.7	3.8
Other States	8.3	-2.9	5.6	3.1	7.8	5.1	-6.6	-1.6	-2.5	-2.0

1. Top 20 states by employment in 2013.

2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 7. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR REVENUES

$ million

INDUSTRY	2003r	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Manufacturing	**2,156**	**2,548**	**2,404**	**2,758**	**2,827**	**2,951**	**2,574**	**2,910**	**2,893**	**3,137**	**3,485**
Services	**11,176**	**11,998**	**13,861**	**14,450**	**15,902**	**16,144**	**15,257**	**16,539**	**18,307**	**19,001**	**19,795**
Motion picture production & post-production	623	442	704	767	750	805	519	484	592	576	593
Telecommunications	5,120	5,204	5,621	5,497	5,741	5,353	4,955	5,991	5,564	5,526	5,669
Engineering services	1,513	1,565	1,983	2,412	2,923	3,042	2,903	2,918	3,314	3,604	3,921
Software publishing	798	1,165	1,186	1,277	1,324	1,498	1,224	1,335	1,394	1,320	1,509
Other computer and related services	2,201	2,490	2,920	3,199	3,381	3,420	3,678	3,763	3,977	4,286	4,290
Other services	920	1,133	1,448	1,298	1,783	2,025	1,978	2,048	3,467	3,690	3,813
High Technology Sector Total	**13,332**	**14,546**	**16,265**	**17,208**	**18,729**	**19,095**	**17,831**	**19,449**	**21,201**	**22,138**	**23,280**

% change from previous year

INDUSTRY	2003r	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Manufacturing	**1.6**	**18.2**	**-5.7**	**14.7**	**2.5**	**4.4**	**-12.8**	**13.0**	**-0.6**	**8.4**	**11.1**
Services	**8.2**	**7.4**	**15.5**	**4.2**	**10.0**	**1.5**	**-5.5**	**8.4**	**10.7**	**3.8**	**4.2**
Motion picture production & post-production	31.2	-29.2	59.4	8.9	-2.2	7.4	-35.5	-6.9	22.3	-2.7	3.0
Telecommunications	8.7	1.6	8.0	-2.2	4.4	-6.8	-7.4	20.9	-7.1	-0.7	2.6
Engineering services	6.9	3.4	26.7	21.7	21.1	4.1	-4.6	0.5	13.6	8.8	8.8
Software publishing	-2.4	45.9	1.8	7.7	3.7	13.1	-18.3	9.1	4.4	-5.3	14.4
Other computer and related services	13.2	13.1	17.3	9.5	5.7	1.2	7.5	2.3	5.7	7.8	0.1
Other services	-5.0	23.1	27.8	-10.3	37.3	13.6	-2.3	3.5	69.3	6.4	3.3
High Technology Sector Total	**7.1**	**9.1**	**11.8**	**5.8**	**8.8**	**2.0**	**-6.6**	**9.1**	**9.0**	**4.4**	**5.2**

r Revised

p Preliminary

Source: BC Stats and Statistics Canada

TABLE 8. HIGH TECHNOLOGY SECTOR REVENUES, BY PROVINCE AND THE UNITED STATES

Cdn $ million

Region	2003r	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Canada	142,390	150,851	156,347	166,372	175,170	185,946	187,776	191,967	204,840	213,481	216,882
British Columbia	13,332	14,546	16,265	17,208	18,729	19,095	17,831	19,449	21,201	22,138	23,280
Alberta	14,116	15,448	16,572	19,127	20,940	22,432	21,956	21,903	23,819	26,622	28,094
Saskatchewan	2,054	2,127	2,518	2,677	2,594	3,972	3,890	4,340	4,861	4,690	4,619
Manitoba	3,765	3,719	3,849	4,034	3,782	5,013	5,161	5,973	6,519	7,057	7,086
Ontario	61,373	67,163	69,201	73,996	77,031	81,868	84,697	84,904	89,355	90,466	91,371
Quebec	42,435	42,363	42,243	43,085	44,975	47,052	46,957	48,091	50,661	53,642	53,430
United States[1]	2,572,633	2,514,218	2,516,432	2,494,222	2,525,557	2,594,076	2,633,067	2,460,289	2,496,378	2,709,440	2,751,258

% change from previous year

Region	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013p
Canada	5.9	3.6	6.4	5.3	6.2	1.0	2.2	6.7	4.2	1.6
British Columbia	9.1	11.8	5.8	8.8	2.0	-6.6	9.1	9.0	4.4	5.2
Alberta	9.4	7.3	15.4	9.5	7.1	-2.1	-0.2	8.7	11.8	5.5
Saskatchewan	3.6	18.4	6.3	-3.1	53.1	-2.0	11.6	12.0	-3.5	-1.5
Manitoba	-1.2	3.5	4.8	-6.2	32.6	3.0	15.7	9.1	8.2	0.4
Ontario	9.4	3.0	6.9	4.1	6.3	3.5	0.2	5.2	1.2	1.0
Quebec	-0.2	-0.3	2.0	4.4	4.6	-0.2	2.4	5.3	5.9	3.3
United States	-2.3	0.1	-0.9	1.3	2.7	1.5	-6.6	1.5	8.5	1.5

1. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

r Revised

p Preliminary

Source: BC Stats

TABLE 9. HIGH TECHNOLOGY SECTOR REVENUES FOR SELECTED U.S. STATES[1]

					Cdn $ million[2]						
State	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012	2013[p]
USA	2,572,633	2,514,218	2,516,432	2,494,222	2,525,557	2,594,076	2,633,067	2,460,289	2,496,378	2,709,440	2,751,258
California	463,413	454,029	443,743	436,809	454,700	472,706	479,617	459,498	471,329	540,263	535,009
Texas	203,691	201,351	204,613	208,418	210,605	218,277	200,280	186,142	186,074	202,287	209,774
New York	147,441	145,696	148,097	149,132	146,231	152,082	165,555	155,241	155,072	158,466	156,655
Florida	101,820	102,677	101,154	97,728	100,032	101,295	102,775	95,863	95,564	101,729	104,290
Massachusetts	104,901	103,696	97,392	99,304	101,441	105,518	101,108	99,656	96,666	106,518	108,108
Washington	101,420	86,491	102,500	107,698	104,642	108,926	114,356	102,005	107,247	121,280	124,035
Virginia	101,533	103,879	98,521	90,534	101,099	100,670	109,335	100,070	98,728	105,664	111,453
Pennsylvania	105,709	99,713	97,918	91,178	87,476	93,099	96,542	82,628	81,286	87,144	89,649
Illinois	85,339	88,945	83,730	82,138	85,328	90,305	90,042	83,825	86,551	86,467	92,515
New Jersey	103,534	98,313	96,768	101,678	103,281	105,820	107,498	100,300	100,514	108,034	107,742
North Carolina	73,765	68,714	76,293	80,802	77,621	78,708	82,378	75,004	82,496	78,164	87,618
Georgia	74,374	73,762	74,324	71,236	72,239	73,223	75,602	72,312	74,105	84,060	85,852
Ohio	65,152	62,762	64,060	62,127	63,913	64,819	65,526	60,147	60,544	65,256	67,612
Michigan	49,492	44,314	43,958	40,944	42,878	43,414	43,457	43,160	43,791	47,801	48,004
Maryland	55,851	54,895	55,501	54,615	56,632	61,197	65,930	60,385	60,726	63,309	67,733
Colorado	63,243	57,499	60,068	62,263	64,187	65,263	69,502	64,935	65,005	69,622	71,745
Minnesota	44,527	42,262	43,837	41,876	39,028	41,015	39,816	38,701	38,510	41,286	44,165
Arizona	56,961	49,344	44,512	48,320	47,647	48,030	46,801	42,476	42,123	45,030	47,747
Missouri	45,936	44,920	43,642	40,795	41,410	42,493	43,520	40,159	39,913	44,936	43,196
Indiana	44,577	46,132	47,675	45,620	49,656	51,657	54,568	47,867	49,820	52,055	53,796
Other States	479,955	484,826	488,125	481,007	475,504	475,561	478,869	449,815	460,314	500,071	493,560

					% change from previous year						
State	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012	2013[p]
USA	-2.3	0.1	-0.9	1.3	2.7	1.5	-6.6	1.5	8.5	1.5
California	-2.0	-2.3	-1.6	4.1	4.0	1.5	-4.2	2.6	14.6	-1.0
Texas	-1.1	1.6	1.9	1.0	3.6	-8.2	-7.1	0.0	8.7	3.7
New York	-1.2	1.6	0.7	-1.9	4.0	8.9	-6.2	-0.1	2.2	-1.1
Florida	0.8	-1.5	-3.4	2.4	1.3	1.5	-6.7	-0.3	6.5	2.5
Massachusetts	-1.1	-6.1	2.0	2.2	4.0	-4.2	-1.4	-3.0	10.2	1.5
Washington	-14.7	18.5	5.1	-2.8	4.1	5.0	-10.8	5.1	13.1	2.3
Virginia	2.3	-5.2	-8.1	11.7	-0.4	8.6	-8.5	-1.3	7.0	5.5
Pennsylvania	-5.7	-1.8	-6.9	-4.1	6.4	3.7	-14.4	-1.6	7.2	2.9
Illinois	4.2	-5.9	-1.9	3.9	5.8	-0.3	-6.9	3.3	-0.1	7.0
New Jersey	-5.0	-1.6	5.1	1.6	2.5	1.6	-6.6	0.1	7.5	-0.3
North Carolina	-6.8	11.0	5.9	-3.9	1.4	4.7	-9.0	10.0	-5.3	12.1
Georgia	-0.8	0.8	-4.2	1.4	1.4	3.2	-4.4	2.5	13.4	2.1
Ohio	-3.7	2.1	-3.0	2.9	1.4	1.1	-8.2	0.7	7.8	3.6
Michigan	-10.5	-0.8	-6.9	4.7	1.3	0.1	-0.7	1.5	9.2	2.5
Maryland	-1.7	1.1	-1.6	3.7	8.1	7.7	-8.4	0.6	4.3	7.0
Colorado	-9.1	4.5	3.7	3.1	1.7	6.5	-6.6	0.1	7.1	3.1
Minnesota	-5.1	3.7	-4.5	-6.8	5.1	-2.9	-2.8	-0.5	7.2	7.0
Arizona	-13.4	-9.8	8.6	-1.4	0.8	-2.6	-9.2	-0.8	6.9	6.0
Missouri	-2.2	-2.8	-6.5	1.5	2.6	2.4	-7.7	-0.6	12.6	-3.9
Indiana	3.5	3.3	-4.3	8.8	4.0	5.6	-12.3	4.1	4.5	3.3
Other States	1.0	0.7	-1.5	-1.1	0.0	0.7	-6.1	2.3	8.6	-1.3

1. Top 20 states by employment in 2013.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 10. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR EMPLOYMENT[1]

INDUSTRY	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Manufacturing Industries	**13,660**	**13,190**	**12,830**	**14,650**	**15,610**	**15,140**	**12,530**	**12,910**	**11,820**	**12,940**	**13,030**
Service Industries	**56,240**	**57,030**	**62,270**	**66,250**	**70,880**	**73,130**	**72,090**	**71,040**	**73,120**	**72,660**	**73,770**
Motion picture production & post-production	4,280	4,980	5,890	5,820	6,340	5,700	7,570	7,650	6,840	4,750	4,800
Telecommunications	11,050	11,150	11,210	11,170	11,010	11,080	10,850	10,350	10,380	10,350	8,880
Engineering services	10,200	10,270	12,450	13,180	13,910	15,230	13,970	12,990	14,530	15,780	18,380
Software publishing	4,730	5,490	7,090	7,390	8,160	8,490	8,040	7,650	7,220	7,660	7,800
Other computer and related services	17,510	16,520	17,360	18,850	19,240	20,230	19,740	20,970	22,620	22,130	21,950
Other services	8,470	8,620	8,270	9,840	12,220	12,410	11,920	11,440	11,530	12,000	11,970
High Technology Sector Total	**69,890**	**70,220**	**75,100**	**80,900**	**86,490**	**88,270**	**84,620**	**83,950**	**84,940**	**85,600**	**86,800**
BC Industrial Aggregate	**1,651,370**	**1,692,380**	**1,751,780**	**1,826,330**	**1,891,500**	**1,942,870**	**1,891,540**	**1,894,240**	**1,924,190**	**1,946,820**	**1,981,750**

	% change from previous year									
INDUSTRY	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Manufacturing Industries	**-3.4**	**-2.7**	**14.2**	**6.6**	**-3.0**	**-17.3**	**3.0**	**-8.4**	**9.4**	**0.7**
Service Industries	**1.4**	**9.2**	**6.4**	**7.0**	**3.2**	**-1.4**	**-1.4**	**2.9**	**-0.6**	**1.5**
Motion picture production & post-production	16.2	18.2	-1.2	9.1	-10.2	32.9	1.0	-10.5	-30.6	1.2
Telecommunications	1.0	0.6	-0.4	-1.4	0.6	-2.1	-4.6	0.2	-0.3	-14.2
Engineering services	0.7	21.3	5.8	5.5	9.5	-8.3	-7.0	11.9	8.6	16.4
Software publishing	16.0	29.2	4.3	10.3	4.1	-5.3	-4.9	-5.5	6.1	1.8
Other computer and related services	-5.6	5.0	8.6	2.1	5.2	-2.4	6.3	7.8	-2.2	-0.8
Other services	1.9	-4.1	19.1	24.1	1.6	-3.9	-4.1	0.8	4.1	-0.3
High Technology Sector Total	**0.5**	**6.9**	**7.7**	**6.9**	**2.1**	**-4.1**	**-0.8**	**1.2**	**0.8**	**1.4**
BC Industrial Aggregate	**2.5**	**3.5**	**4.3**	**3.6**	**2.7**	**-2.6**	**0.1**	**1.6**	**1.2**	**1.8**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

TABLE 11. BRITISH COLUMBIA EMPLOYMENT BY INDUSTRY[1]

	Persons (thousands)										
	2003r	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013
Goods Producing Industries	**282.6**	**292.0**	**302.7**	**318.2**	**328.9**	**329.1**	**291.7**	**289.6**	**302.8**	**309.8**	**316.0**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na	na
Forestry and Related	66.7	67.5	64.7	61.4	60.6	54.3	43.0	42.1	42.7	43.2	43.1
Logging and Forestry	17.1	17.8	16.5	15.0	14.7	12.4	9.5	10.6	11.1	11.3	11.4
Paper and Allied Products	13.6	13.2	12.3	12.2	11.9	10.7	8.7	7.6	7.3	7.8	7.9
Wood Manufacturing	36.0	36.5	35.9	34.2	33.9	31.1	24.8	23.9	24.3	24.0	23.9
Mining and Oil and Gas Extraction	11.1	11.8	13.3	14.8	16.2	18.3	15.2	15.8	18.9	22.2	22.8
Other Manufacturing	87.9	88.5	90.9	98.8	98.1	94.9	79.4	78.5	80.7	79.5	78.6
Construction	79.4	87.5	96.0	107.9	119.0	126.8	115.1	115.4	121.7	125.0	130.4
Utilities	7.9	7.9	9.2	9.3	8.9	9.2	10.0	9.3	9.4	9.5	9.2
Service Producing Industries	**1,354.6**	**1,376.4**	**1,412.1**	**1,477.4**	**1,530.7**	**1,580.2**	**1,561.8**	**1,559.6**	**1,577.0**	**1,594.2**	**1,630.4**
Retail and Wholesale Trade	307.0	314.6	324.1	336.6	350.1	357.5	344.1	338.7	341.9	342.6	348.3
Transportation and Warehousing	90.7	92.2	93.5	96.6	99.1	100.1	97.4	97.6	100.8	104.2	106.2
Information and Culture	37.2	37.5	40.6	41.8	44.7	43.4	44.0	43.6	43.2	40.7	38.6
Finance, Insurance and Real Estate	101.3	102.1	104.9	109.4	112.5	116.3	113.8	114.4	115.2	116.7	121.4
Professional, Scientific and Technical	79.8	80.5	82.7	89.5	95.4	101.7	97.6	97.0	100.4	104.2	106.6
Educational	124.7	126.8	129.0	134.7	138.5	139.1	138.1	136.4	139.3	142.4	144.5
Health and Social	189.4	185.0	186.7	195.4	200.1	205.7	212.9	217.5	222.3	225.1	232.9
Arts, Entertainment and Recreation	30.9	33.1	33.3	35.5	36.5	35.6	37.8	36.2	36.9	36.6	37.3
Accommodation, and Food	155.7	157.3	161.7	169.7	176.2	184.9	185.0	185.2	186.0	190.4	200.1
Public Administration	101.0	100.3	101.0	104.4	107.7	114.7	117.4	117.8	118.2	117.3	116.3
Other Services	136.8	147.0	154.7	163.9	170.0	181.2	173.9	175.2	172.9	174.0	178.3
BC Industrial Aggregate	**1,651.4**	**1,692.4**	**1,751.8**	**1,826.3**	**1,891.5**	**1,942.9**	**1,891.5**	**1,894.2**	**1,924.2**	**1,946.8**	**1,981.7**
High Technology Sector Total	**69.9**	**70.2**	**75.1**	**80.9**	**86.5**	**88.3**	**84.6**	**84.0**	**84.9**	**85.6**	**86.8**

	% change from previous year									
	2004r	2005r	2006r	2007r	2008r	2009r	2010r	2011r	2012r	2013
Goods Producing Industries	**3.3**	**3.7**	**5.1**	**3.3**	**0.1**	**-11.4**	**-0.7**	**4.6**	**2.3**	**2.0**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na
Forestry and Related	1.2	-4.1	-5.1	-1.3	-10.4	-20.9	-2.0	1.5	1.1	-0.1
Logging and Forestry	3.9	-7.0	-9.5	-1.4	-15.6	-23.6	11.4	5.1	2.0	0.4
Paper and Allied Products	-2.9	-7.2	-0.2	-2.5	-10.1	-19.2	-11.8	-4.5	6.7	1.1
Wood Manufacturing	1.4	-1.6	-4.8	-0.8	-8.2	-20.4	-3.6	1.7	-1.1	-0.7
Mining and Oil and Gas Extraction	6.7	12.3	11.6	9.6	12.6	-17.1	4.1	19.7	17.4	2.6
Other Manufacturing	0.6	2.7	8.7	-0.7	-3.3	-16.3	-1.2	2.9	-1.5	-1.1
Construction	10.2	9.8	12.3	10.3	6.6	-9.2	0.2	5.4	2.7	4.3
Utilities	1.1	15.5	1.9	-4.6	3.6	8.8	-7.7	1.9	0.1	-2.9
Service Producing Industries	**1.6**	**2.6**	**4.6**	**3.6**	**3.2**	**-1.3**	**-0.1**	**1.1**	**1.1**	**2.3**
Retail and Wholesale Trade	2.5	3.0	3.9	4.0	2.1	-3.7	-1.6	0.9	0.2	1.7
Transportation and Warehousing	1.7	1.4	3.3	2.6	1.1	-2.7	0.3	3.2	3.4	1.8
Information and Culture	1.0	8.2	2.8	7.0	-2.9	1.5	-1.1	-0.8	-5.8	-5.1
Finance, Insurance and Real Estate	0.7	2.8	4.3	2.8	3.3	-2.1	0.5	0.7	1.3	4.1
Professional, Scientific and Technical	0.9	2.8	8.2	6.6	6.6	-4.1	-0.6	3.5	3.8	2.3
Educational	1.7	1.7	4.4	2.8	0.5	-0.8	-1.2	2.1	2.2	1.5
Health and Social	-2.3	0.9	4.7	2.4	2.8	3.5	2.2	2.2	1.3	3.4
Arts, Entertainment and Recreation	7.1	0.5	6.8	2.8	-2.4	6.0	-4.1	1.8	-0.7	1.9
Accommodation, and Food	1.0	2.7	5.0	3.9	4.9	0.1	0.1	0.4	2.4	5.1
Public Administration	-0.7	0.6	3.4	3.2	6.5	2.4	0.3	0.3	-0.7	-0.9
Other Services	7.4	5.2	6.0	3.7	6.6	-4.0	0.8	-1.3	0.6	2.5
BC Industrial Aggregate	**2.5**	**3.5**	**4.3**	**3.6**	**2.7**	**-2.6**	**0.1**	**1.6**	**1.2**	**1.8**
High Technology Sector Total	**0.5**	**6.9**	**7.7**	**6.9**	**2.1**	**-4.1**	**-0.8**	**1.2**	**0.8**	**1.4**

1. Totals and percent changes are calculated using unrounded data.

r Revised

na: Data not available for specific industry.

Source: Statistics Canada and BC Stats

TABLE 12. HIGH TECHNOLOGY SECTOR EMPLOYMENT, BY PROVINCE

Province	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Canada	703,460	702,200	723,300	756,750	778,330	792,830	776,600	774,250	785,100	811,480	819,180
British Columbia	69,890	70,220	75,100	80,900	86,490	88,270	84,620	83,950	84,940	85,600	86,800
Alberta	66,930	68,750	72,230	78,810	82,120	83,750	77,400	75,930	79,690	86,500	89,230
Saskatchewan	12,170	11,850	13,330	13,460	13,830	14,010	13,710	13,730	14,530	15,670	15,920
Manitoba	17,380	17,340	18,200	18,360	18,940	19,480	18,570	18,610	19,170	19,030	19,530
Ontario	297,690	290,950	296,700	311,660	320,870	328,330	325,540	320,390	319,280	332,320	336,140
Quebec	203,590	208,610	211,160	213,880	217,080	220,030	216,700	220,630	227,720	233,000	230,760

Province	% change from previous year										
	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Canada	-0.2	3.0	4.6	2.9	1.9	-2.0	-0.3	1.4	3.4	0.9	
British Columbia	0.5	6.9	7.7	6.9	2.1	-4.1	-0.8	1.2	0.8	1.4	
Alberta	2.7	5.1	9.1	4.2	2.0	-7.6	-1.9	4.9	8.6	3.2	
Saskatchewan	-2.6	12.5	0.9	2.8	1.2	-2.1	0.1	5.9	7.8	1.7	
Manitoba	-0.3	5.3	0.8	3.2	2.9	-4.7	0.2	3.0	-0.7	2.7	
Ontario	-2.3	2.0	5.0	3.0	2.3	-0.9	-1.6	-0.3	4.1	1.2	
Quebec	2.5	1.2	1.3	1.5	1.4	-1.5	1.8	3.2	2.3	-1.0	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 13. HIGH TECHNOLOGY SECTOR EMPLOYMENT FOR TOP 20 U.S. STATES

State	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
USA	**7,534,790**	**7,516,820**	**7,645,050**	**7,846,410**	**7,982,090**	**8,097,080**	**7,747,570**	**7,469,330**	**7,822,530**	**7,971,150**	**8,092,400**
California	1,297,770	1,314,430	1,334,600	1,373,260	1,386,790	1,405,020	1,335,250	1,331,740	1,362,920	1,401,720	1,433,260
Texas	565,640	556,200	570,550	590,400	608,430	624,330	592,060	584,190	602,910	623,800	642,150
New York	431,060	425,690	429,160	433,320	437,560	442,810	429,940	434,080	448,930	461,910	466,660
Florida	337,580	345,700	360,200	367,070	365,620	367,810	347,460	339,640	341,240	340,790	346,910
Massachusetts	295,520	291,500	292,400	299,350	303,480	311,750	302,170	302,200	307,950	315,290	319,510
Washington	234,610	233,280	243,510	259,170	278,860	291,640	286,990	286,780	299,430	310,390	315,910
Virginia	278,190	291,980	302,300	312,480	317,850	324,440	320,990	319,930	321,970	321,070	314,910
Pennsylvania	294,530	286,890	288,520	297,300	298,730	304,280	294,430	287,950	290,840	294,830	293,920
Illinois	284,980	277,130	278,510	281,820	283,350	286,870	271,520	266,260	270,960	276,830	279,150
New Jersey	275,790	270,760	271,930	281,230	287,040	281,090	264,470	256,890	254,360	251,380	250,520
North Carolina	194,680	193,400	202,690	206,310	212,320	215,170	207,740	205,350	213,170	219,510	222,730
Georgia	216,370	211,400	211,550	214,450	218,170	217,940	210,150	208,910	211,040	217,920	222,380
Ohio	219,910	210,620	212,850	216,210	220,730	226,610	216,990	215,000	221,980	218,920	221,560
Michigan	224,940	216,690	216,610	214,170	211,910	207,960	187,130	191,530	200,720	211,570	219,380
Maryland	189,060	192,940	198,420	202,740	207,480	211,390	211,570	211,660	213,360	212,690	211,580
Colorado	191,620	188,790	188,180	188,280	191,610	196,840	191,760	187,320	194,060	196,210	201,040
Minnesota	155,650	156,340	159,530	161,860	164,300	165,890	156,020	154,030	156,930	158,830	161,240
Arizona	145,380	146,380	148,450	154,750	155,110	155,060	146,290	143,600	148,420	151,330	155,830
Missouri	119,460	122,620	124,220	127,600	129,770	131,960	129,000	123,040	124,180	129,980	135,340
Indiana	122,110	123,250	124,500	126,390	128,390	130,070	124,430	123,720	122,540	125,190	126,190
Other States	1,459,950	1,460,860	1,486,380	1,538,240	1,573,590	1,598,150	1,521,220	1,495,540	1,514,630	1,531,010	1,552,220

State	% change from previous year[1]										
	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
USA	**-0.2**	**1.7**	**2.6**	**1.7**	**1.4**	**-4.3**	**-1.0**	**2.0**	**1.9**	**1.5**	
California	1.3	1.5	2.9	1.0	1.3	-5.0	-0.3	2.3	2.8	2.3	
Texas	-1.7	2.6	3.5	3.2	2.4	-5.2	-1.3	3.2	3.5	2.9	
New York	-1.2	0.8	1.0	1.0	1.2	-2.9	1.0	3.4	2.9	1.0	
Florida	2.4	4.2	1.9	-0.4	0.6	-5.5	-2.3	0.5	-0.1	1.8	
Massachusetts	-1.4	0.3	2.4	1.4	2.7	-3.1	0.0	1.9	2.4	1.3	
Washington	-0.6	4.4	6.4	7.6	4.6	-1.6	-0.1	4.4	3.7	1.8	
Virginia	5.0	3.5	3.4	1.7	2.1	1.1	-0.3	0.6	-0.3	-1.9	
Pennsylvania	-2.6	0.6	3.0	0.5	1.9	3.2	-2.7	1.0	1.4	-0.3	
Illinois	-2.8	0.5	1.2	0.5	1.2	-5.4	-1.9	1.8	2.2	0.8	
New Jersey	-1.8	0.4	3.4	2.1	-2.1	-5.9	-2.9	-1.0	-1.2	-0.3	
North Carolina	-0.7	4.8	1.8	2.9	1.3	-3.5	-1.2	-3.8	3.0	1.5	
Georgia	-2.3	-0.1	1.4	1.7	-0.1	-3.6	-0.6	1.0	3.3	2.0	
Ohio	-4.2	1.1	1.6	2.1	2.7	-4.2	-0.9	-3.2	-1.4	-1.2	
Michigan	-3.7	0.0	-1.1	-1.1	-1.9	-10.0	-2.3	-4.8	-5.4	-3.7	
Maryland	2.0	2.8	2.2	2.3	-1.9	-0.1	-0.0	-0.8	-0.3	-0.5	
Colorado	-1.5	-0.3	-0.1	-1.8	-2.7	-2.6	-2.3	-3.6	-1.1	-2.5	
Minnesota	-0.4	-2.0	-1.5	-1.5	-1.0	-6.0	-1.3	-1.0	-1.2	-1.5	
Arizona	-0.7	-1.4	-4.2	-0.7	-0.0	-5.7	-1.8	-3.4	-2.0	-3.0	
Missouri	-2.6	-1.3	-2.7	-1.7	-1.7	-2.2	-4.6	-0.9	-4.7	-4.1	
Indiana	-0.9	-1.0	-1.5	-1.6	-1.3	-4.3	-0.6	-1.0	-2.2	-0.8	
Other States	-0.2	-1.7	-3.5	-2.3	-1.5	-4.8	-1.7	-1.3	-1.1	-1.4	

1. Percent changes are calculated using unrounded data.
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 14. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR WAGES AND SALARIES

	Value ($ million)									
INDUSTRY	**2003[r]**	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing Industries	**718.0**	**680.6**	**679.6**	**810.0**	**824.1**	**818.2**	**673.8**	**686.9**	**638.5**	**697.8**	**733.9**
Service Industries	**2,758.5**	**2,916.7**	**3,575.4**	**4,090.4**	**4,422.7**	**4,741.9**	**4,862.2**	**4,783.6**	**5,101.3**	**5,486.7**	**5,553.1**
Motion picture production & post-production	159.0	142.8	205.6	206.9	225.0	258.9	156.8	146.1	177.9	141.7	159.1
Telecommunications	477.9	531.1	585.2	572.6	609.9	610.5	695.1	634.8	695.6	740.3	551.6
Engineering services	617.0	618.9	838.0	944.3	1,062.2	1,231.1	1,195.2	1,199.1	1,385.6	1,549.1	1,685.4
Software publishing	284.2	324.8	434.8	486.3	564.7	594.1	630.8	574.4	545.8	574.5	656.9
Other computer and related services	794.5	848.7	1,055.3	1,309.9	1,231.7	1,316.7	1,443.9	1,431.7	1,528.1	1,645.3	1,631.0
Other services	425.9	450.3	466.5	570.5	729.2	730.6	740.4	797.5	768.2	835.7	869.1
High Technology Sector Total	**3,476.5**	**3,597.3**	**4,255.0**	**4,900.4**	**5,246.8**	**5,560.2**	**5,535.9**	**5,470.5**	**5,739.8**	**6,184.5**	**6,287.1**
BC Industrial Aggregate	**58,998.1**	**61,502.6**	**65,977.1**	**70,802.5**	**75,821.5**	**79,868.3**	**78,381.5**	**80,796.6**	**84,287.4**	**87,724.4**	**90,216.8**

	% change from previous year									
INDUSTRY	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing Industries	**-5.2**	**-0.1**	**19.2**	**1.7**	**-0.7**	**-17.6**	**1.9**	**-7.0**	**9.3**	**5.2**
Service Industries	**5.7**	**22.6**	**14.4**	**8.1**	**7.2**	**2.5**	**-1.6**	**6.6**	**7.6**	**1.2**
Motion picture production & post-production	-10.2	44.0	0.6	8.7	15.1	-39.4	-6.8	21.8	-20.3	12.3
Telecommunications	11.1	10.2	-2.2	6.5	0.1	13.9	-8.7	9.6	6.4	-25.5
Engineering services	0.3	35.4	12.7	12.5	15.9	-2.9	0.3	15.6	11.8	8.8
Software publishing	14.3	30.8	14.5	16.1	5.2	6.2	-8.9	-5.0	5.3	14.3
Other computer and related services	6.8	24.3	24.1	-6.0	6.9	9.7	-0.8	6.7	7.7	-0.9
Other services	5.7	3.6	22.3	27.8	0.2	1.3	7.7	-3.7	8.8	4.0
High Technology Sector Total	**3.5**	**18.3**	**15.2**	**7.1**	**6.0**	**-0.4**	**-1.2**	**4.9**	**7.7**	**1.7**
BC Industrial Aggregate	**4.2**	**7.3**	**7.3**	**7.1**	**5.3**	**-1.9**	**3.1**	**4.3**	**4.1**	**2.8**

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

TABLE 15. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR AVERAGE WEEKLY EARNINGS[1]

	Dollars per employee week (including overtime)									
INDUSTRY	**2003[r]**	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing Industries	**1,010**	**990**	**1,020**	**1,060**	**1,010**	**1,040**	**1,030**	**1,020**	**1,040**	**1,030**	**1,080**
Service Industries	**948**	**980**	**1,100**	**1,180**	**1,200**	**1,240**	**1,290**	**1,290**	**1,340**	**1,450**	**1,440**
Motion picture production & post-production	710	550	670	680	680	870	400	370	500	570	640
Telecommunications	830	910	1,000	980	1,060	1,060	1,230	1,180	1,290	1,370	1,190
Engineering services	1,160	1,160	1,290	1,370	1,460	1,550	1,640	1,770	1,830	1,880	1,760
Software publishing	1,150	1,140	1,150	1,260	1,330	1,340	1,500	1,440	1,450	1,440	1,620
Other computer and related services	870	960	1,170	1,330	1,230	1,250	1,400	1,310	1,300	1,430	1,420
Other services	960	1,000	1,080	1,110	1,140	1,130	1,190	1,340	1,280	1,340	1,390
High Technology Sector Total	**950**	**980**	**1,090**	**1,160**	**1,160**	**1,210**	**1,250**	**1,250**	**1,300**	**1,390**	**1,390**
BC Industrial Aggregate	**690**	**700**	**720**	**740**	**770**	**790**	**790**	**820**	**840**	**860**	**870**

	% change from previous year									
INDUSTRY	**2004[r]**	**2005[r]**	**2006[r]**	**2007[r]**	**2008[r]**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Manufacturing Industries	**-1.8**	**2.6**	**4.4**	**-4.5**	**2.4**	**-0.5**	**-1.0**	**1.5**	**-0.1**	**4.5**
Service Industries	**4.3**	**12.3**	**7.5**	**1.1**	**3.9**	**4.0**	**-0.2**	**3.6**	**8.2**	**-0.3**
Motion picture production & post-production	-22.7	21.8	1.8	-0.3	28.2	-54.4	-7.7	36.1	14.8	11.0
Telecommunications	10.1	9.6	-1.7	8.0	-0.5	16.3	-4.3	9.3	6.7	-13.2
Engineering services	-0.4	11.6	6.5	6.6	5.9	5.8	7.9	3.3	3.0	-6.6
Software publishing	-1.5	1.3	9.8	5.2	1.1	12.1	-4.2	0.6	-0.8	12.4
Other computer and related services	13.2	18.4	14.3	-7.9	1.6	12.4	-6.7	-1.0	10.1	-0.1
Other services	3.8	8.0	2.7	3.0	-1.4	5.5	12.3	-4.4	4.5	4.3
High Technology Sector Total	**3.0**	**10.6**	**6.9**	**0.1**	**3.8**	**3.9**	**-0.4**	**3.7**	**6.9**	**0.3**
BC Industrial Aggregate	**1.7**	**3.6**	**2.9**	**3.4**	**2.6**	**0.8**	**2.9**	**2.7**	**2.9**	**1.0**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

TABLE 16. HIGH TECHNOLOGY SECTOR AVERAGE WEEKLY EARNINGS, BY PROVINCE

Province	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Canada	970	1,040	1,050	1,130	1,180	1,200	1,230	1,260	1,310	1,340	1,380
British Columbia	950	980	1,090	1,160	1,160	1,210	1,250	1,250	1,300	1,390	1,390
Alberta	1,050	1,100	1,150	1,320	1,430	1,490	1,500	1,560	1,710	1,750	1,820
Saskatchewan	910	1,040	1,020	1,020	1,080	1,080	1,230	1,280	1,340	1,430	1,420
Manitoba	990	1,020	1,060	1,050	1,150	1,120	1,180	1,130	1,190	1,260	1,300
Ontario	1,030	1,120	1,100	1,190	1,220	1,270	1,300	1,340	1,390	1,380	1,430
Quebec	890	950	950	1,010	1,050	1,030	1,070	1,090	1,110	1,130	1,180
				% change from previous year							
Province		2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Canada		7.0	1.1	7.4	4.3	2.2	2.5	2.3	3.8	2.3	3.2
British Columbia		3.0	10.6	6.9	0.1	3.8	3.9	-0.4	3.7	6.9	0.3
Alberta		5.3	4.4	14.5	8.8	4.3	0.3	4.3	9.2	2.4	4.1
Saskatchewan		14.3	-1.6	-0.1	6.0	-0.5	13.7	4.6	4.9	6.3	-0.4
Manitoba		3.1	3.2	-0.8	9.3	-2.5	5.6	-4.0	5.0	5.6	3.2
Ontario		9.4	-1.7	7.9	2.6	3.9	2.4	3.4	3.0	-0.4	3.9
Quebec		6.8	0.5	5.7	4.0	-2.3	4.0	2.0	1.8	2.3	4.6

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 17. HIGH TECHNOLOGY SECTOR WAGES AND SALARIES FOR SELECTED U.S. STATES[1]

				Value ($C dn million)[2]							
State	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
USA	**706,451**	**687,025**	**677,218**	**683,390**	**689,447**	**704,580**	**730,817**	**682,541**	**694,629**	**745,517**	**796,452**
California	146,808	146,539	145,742	146,595	146,727	146,797	151,683	145,787	150,382	169,557	183,066
Texas	52,099	50,293	50,403	52,457	52,846	54,679	55,698	51,363	52,939	56,771	61,674
New York	40,934	39,473	38,571	38,144	38,770	39,808	41,594	39,479	40,708	43,829	46,555
Florida	25,681	25,754	25,880	26,016	25,572	25,951	26,829	24,427	24,425	25,576	27,238
Massachusetts	32,725	31,817	30,643	30,914	31,784	32,861	34,053	33,369	33,642	35,954	38,217
Washington	28,127	23,363	23,999	25,509	27,013	28,616	30,640	28,781	30,352	33,128	35,652
Virginia	28,128	28,949	29,444	29,534	29,700	30,908	33,686	31,516	31,452	32,200	33,075
Pennsylvania	26,051	24,689	23,993	24,121	24,069	24,738	26,364	23,973	23,785	25,262	26,361
Illinois	25,845	24,763	24,603	24,090	23,902	24,443	24,756	22,692	23,136	25,165	26,730
New Jersey	30,544	29,460	28,091	29,185	29,775	29,647	30,046	27,161	26,753	27,895	29,541
North Carolina	16,711	16,230	16,334	16,250	16,694	17,058	18,066	16,906	17,320	18,435	19,746
Georgia	19,236	18,142	17,751	17,792	17,917	17,923	18,555	17,089	17,383	18,539	19,667
Ohio	17,053	15,963	15,429	15,285	15,559	16,494	16,707	15,324	15,655	15,850	16,747
Michigan	20,902	19,352	18,486	17,575	17,118	17,119	15,611	14,579	15,340	16,503	17,909
Maryland	18,351	18,399	18,192	18,160	18,659	19,384	21,450	20,044	19,973	20,941	21,514
Colorado	19,539	18,307	17,787	17,845	17,860	18,263	19,152	17,586	17,914	18,789	20,193
Minnesota	13,509	13,450	12,805	12,610	12,706	13,118	13,342	12,438	12,640	13,067	14,274
Arizona	12,626	12,437	12,391	12,801	12,512	12,748	13,137	12,120	12,576	13,266	14,244
Missouri	9,880	9,899	9,742	9,858	9,815	10,225	11,007	9,748	9,676	10,572	11,340
Indiana	9,587	9,692	9,295	9,235	9,106	9,649	9,861	9,264	9,167	9,434	10,200
Other States	112,117	110,055	107,638	109,415	111,343	114,151	118,579	108,895	109,410	114,785	122,508
				% change from previous year							
State		2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
USA		**-2.7**	**-1.4**	**0.9**	**0.9**	**2.2**	**3.7**	**-6.6**	**1.8**	**7.3**	**6.8**
California		-0.2	-0.5	0.6	0.1	0.0	3.3	-3.9	3.2	12.8	8.0
Texas		-3.5	0.2	4.1	0.7	3.5	1.9	-7.8	3.1	7.2	8.6
New York		-3.6	-2.3	-1.1	1.6	2.7	4.5	-5.1	3.1	7.7	6.2
Florida		0.3	0.5	0.5	-1.7	1.5	3.4	-9.0	0.0	4.7	6.5
Massachusetts		-2.8	-3.7	0.9	2.8	3.4	3.6	-2.0	0.8	6.9	6.3
Washington		-16.9	2.7	6.3	5.9	5.9	7.1	-6.1	5.5	9.1	7.6
Virginia		2.9	1.7	0.3	0.6	4.1	9.0	-6.4	-0.2	2.4	2.7
Pennsylvania		-5.2	-2.8	0.5	-0.2	2.8	6.6	-9.1	-0.8	6.2	4.4
Illinois		-4.2	-0.6	-2.1	-0.8	2.3	1.3	-8.3	2.0	8.8	6.2
New Jersey		-3.5	-4.6	3.9	2.0	-0.4	1.3	-9.6	-1.5	4.3	5.9
North Carolina		-2.9	0.6	-0.5	2.7	2.2	5.9	-6.4	2.5	6.4	7.1
Georgia		-5.7	-2.2	0.2	0.7	0.0	3.5	-7.9	1.7	6.6	6.1
Ohio		-6.4	-3.3	-0.9	1.8	6.0	1.3	-8.3	2.2	1.2	5.7
Michigan		-7.4	-4.5	-4.9	-2.6	0.0	-8.8	-6.6	5.2	7.6	8.5
Maryland		0.3	-1.1	-0.2	2.7	3.9	10.7	-6.6	-0.4	4.8	2.7
Colorado		-6.3	-2.8	0.3	0.1	2.3	4.9	-8.2	1.9	4.9	7.5
Minnesota		-0.4	-4.8	-1.5	0.8	3.2	1.7	-6.8	1.6	3.4	9.2
Arizona		-1.5	-0.4	3.3	-2.3	1.9	3.1	-7.7	3.8	5.5	7.4
Missouri		0.2	-1.6	1.2	-0.4	4.2	7.7	-11.4	-0.7	9.3	7.3
Indiana		1.1	-4.1	-0.6	-1.4	6.0	2.2	-6.1	-1.0	2.9	8.1
Other States		-1.8	-2.2	1.7	1.8	2.5	3.9	-8.2	0.5	4.9	6.7

1. Top 20 states by employment in 2013.

2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 18. HIGH TECHNOLOGY SECTOR AVERAGE WEEKLY EARNINGS FOR SELECTED U.S. STATES[1]

	Value ($Cdn)[2]									
State	2003[r]	2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
USA	**1,798**	**1,753**	**1,698**	**1,671**	**1,656**	**1,669**	**1,809**	**1,707**	**1,703**	**1,794**	**1,887**
California	2,160	2,138	2,094	2,047	2,029	2,004	2,179	2,090	2,116	2,320	2,450
Texas	1,766	1,734	1,694	1,704	1,663	1,680	1,804	1,686	1,684	1,745	1,842
New York	1,821	1,778	1,724	1,688	1,690	1,724	1,855	1,744	1,739	1,820	1,913
Florida	1,459	1,429	1,378	1,359	1,341	1,353	1,481	1,379	1,373	1,439	1,506
Massachusetts	2,124	2,093	2,010	1,981	2,009	2,022	2,161	2,118	2,095	2,187	2,294
Washington	2,299	1,921	1,890	1,888	1,858	1,882	2,048	1,925	1,944	2,047	2,164
Virginia	1,939	1,901	1,868	1,813	1,792	1,827	2,013	1,880	1,873	1,923	2,014
Pennsylvania	1,686	1,660	1,595	1,556	1,545	1,559	1,717	1,597	1,568	1,643	1,720
Illinois	1,739	1,714	1,694	1,639	1,618	1,634	1,749	1,634	1,638	1,743	1,836
New Jersey	2,124	2,087	1,981	1,990	1,980	2,023	2,179	2,028	2,017	2,128	2,261
North Carolina	1,646	1,609	1,546	1,511	1,508	1,520	1,668	1,579	1,558	1,611	1,700
Georgia	1,705	1,646	1,609	1,591	1,575	1,577	1,693	1,569	1,580	1,632	1,696
Ohio	1,487	1,454	1,390	1,356	1,352	1,396	1,477	1,367	1,352	1,388	1,450
Michigan	1,782	1,713	1,637	1,574	1,540	1,579	1,600	1,460	1,466	1,496	1,566
Maryland	1,862	1,829	1,758	1,718	1,725	1,759	1,944	1,816	1,795	1,888	1,950
Colorado	1,956	1,860	1,813	1,818	1,788	1,779	1,915	1,801	1,770	1,837	1,926
Minnesota	1,664	1,650	1,539	1,494	1,483	1,517	1,640	1,549	1,545	1,578	1,698
Arizona	1,666	1,629	1,601	1,586	1,547	1,577	1,722	1,619	1,625	1,681	1,753
Missouri	1,586	1,548	1,504	1,482	1,450	1,486	1,636	1,520	1,494	1,560	1,607
Indiana	1,506	1,508	1,432	1,401	1,360	1,423	1,520	1,436	1,435	1,445	1,550
	% change from previous year										
State		2004[r]	2005[r]	2006[r]	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
USA		**-2.5**	**-3.1**	**-1.6**	**-0.9**	**0.8**	**8.4**	**-5.7**	**-0.3**	**5.4**	**5.2**
California		-1.4	-2.0	-2.2	-0.9	-1.3	8.7	-3.6	0.8	9.6	5.6
Texas		-1.8	-2.3	0.6	-2.4	1.0	7.4	-6.5	-0.1	3.6	5.5
New York		-2.4	-3.1	-2.1	0.7	1.5	7.6	-6.0	-0.3	4.6	5.1
Florida		-2.1	-3.6	-1.4	-1.3	0.9	9.4	-6.9	-0.5	4.8	4.6
Massachusetts		-1.4	-4.0	-1.5	1.4	0.6	6.9	-2.0	-1.1	4.4	4.9
Washington		-16.5	-1.6	-0.1	-1.6	1.3	8.8	-6.0	1.0	5.3	5.7
Virginia		-1.9	-1.8	-3.0	-1.1	2.0	10.2	-6.1	-0.8	2.7	4.7
Pennsylvania		-2.7	-3.4	-2.4	-0.7	0.9	10.1	-7.0	-1.8	4.8	4.7
Illinois		-1.5	-1.1	-3.2	-1.3	1.0	7.0	-6.5	0.2	6.5	5.3
New Jersey		-1.8	-5.1	0.5	0.0	1.7	7.7	-6.9	-0.5	5.5	6.3
North Carolina		-2.2	-4.0	-2.3	-0.2	0.8	9.7	-5.3	-1.3	3.4	5.6
Georgia		-3.5	-2.2	-1.1	-1.0	0.1	7.4	-7.4	0.7	3.3	4.0
Ohio		-2.3	-4.4	-2.5	-0.3	3.3	5.8	-7.4	-1.1	2.7	4.4
Michigan		-3.9	-4.4	-3.8	-1.6	1.9	1.3	-8.8	0.4	2.1	4.7
Maryland		-1.8	-3.9	-2.3	0.4	2.0	10.6	-6.6	-1.1	5.2	3.3
Colorado		-4.9	-2.5	0.3	-1.7	-0.5	7.6	-6.0	-1.7	3.7	4.9
Minnesota		-0.9	-6.7	-2.9	-0.7	2.2	8.1	-5.6	-0.2	2.1	7.6
Arizona		-2.2	-1.8	-0.9	-2.5	1.9	9.2	-6.0	0.4	3.5	4.3
Missouri		-2.4	-2.9	-1.5	-2.1	2.5	10.1	-7.1	-1.7	4.4	3.0
Indiana		0.2	-5.1	-2.1	-2.9	4.6	6.8	-5.5	-0.1	0.7	7.3

1. Top 20 states by employment in 2013.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 19. HIGH TECHNOLOGY SECTOR BUSINESS COUNTS,[1] BY DEVELOPMENT REGION AND REGIONAL DISTRICT

Development Region / Regional District		2010 Mfg	2010 Service	2010 Total	2011 Mfg	2011 Service	2011 Total	2012 Mfg	2012 Service	2012 Total	2013 Mfg	2013 Service	2013 Total
Vancouver Island/Coast		**97**	**1,366**	**1,463**	**102**	**1,330**	**1,432**	**102**	**1,338**	**1,440**	**101**	**1,442**	**1,543**
23	Alberni-Clayoquot	2	32	34	2	31	33	2	31	33	1	30	31
17	Capital	55	842	897	57	826	883	57	827	884	58	889	947
45	Central Coast	0	4	4	0	3	3	0	5	5	0	4	4
26	Comox Valley[2]	15	144	159	17	135	152	14	133	147	8	93	101
19	Cowichan Valley	10	90	100	10	97	107	9	104	113	10	111	121
43	Mount Waddington	0	13	13	0	12	12	0	10	10	1	11	12
21	Nanaimo	15	225	240	16	211	227	19	211	230	18	234	252
27	Powell River	0	16	16	0	15	15	1	17	18	0	17	17
24	Strathcona	-	-	-	-	-	-	-	-	-	5	53	58
Mainland/Southwest		**509**	**5,520**	**6,029**	**483**	**5,426**	**5,909**	**508**	**5,586**	**6,094**	**548**	**6,075**	**6,623**
09	Fraser Valley	26	223	249	29	214	243	26	212	238	32	242	274
15	Greater Vancouver	476	5,184	5,660	449	5,098	5,547	475	5,264	5,739	509	5,717	6,226
31	Squamish-Lillooet	3	61	64	1	59	60	3	56	59	3	63	66
29	Sunshine Coast	4	52	56	4	55	59	4	54	58	4	53	57
Thompson/Okanagan		**77**	**661**	**738**	**76**	**657**	**733**	**70**	**709**	**779**	**66**	**736**	**802**
35	Central Okanagan	39	255	294	38	258	296	34	287	321	34	300	334
39	Columbia-Shuswap	4	59	63	4	64	68	5	63	68	3	67	70
37	North Okanagan	11	98	109	12	102	114	12	111	123	10	109	119
07	Okanagan-Similkameen	8	77	85	9	71	80	7	80	87	7	89	96
33	Thompson-Nicola	15	172	187	13	162	175	12	168	180	12	171	183
Kootenay		**12**	**189**	**201**	**14**	**190**	**204**	**12**	**197**	**209**	**13**	**219**	**232**
03	Central Kootenay	5	89	94	6	85	91	6	88	94	6	97	103
01	East Kootenay	3	75	78	3	76	79	3	79	82	4	88	92
05	Kootenay Boundary	4	25	29	5	29	34	3	30	33	3	34	37
Cariboo		**18**	**139**	**157**	**17**	**148**	**165**	**18**	**142**	**160**	**18**	**155**	**173**
41	Cariboo	5	55	60	4	62	66	6	59	65	5	58	63
53	Fraser-Fort George	13	84	97	13	86	99	12	83	95	13	97	110
North Coast		**0**	**57**	**57**	**0**	**58**	**58**	**1**	**64**	**65**	**1**	**66**	**67**
49	Kitimat-Stikine	0	38	38	0	37	37	0	42	42	0	45	45
47	Skeena-Queen Charlotte	0	19	19	0	21	21	1	22	23	1	21	22
Nechako		**0**	**44**	**44**	**2**	**42**	**44**	**1**	**42**	**43**	**0**	**47**	**47**
51	Bulkley-Nechako	0	42	42	2	40	42	1	40	41	0	46	46
57	Stikine	0	2	2	0	2	2	0	2	2	0	1	1
Northeast		**7**	**182**	**189**	**7**	**184**	**191**	**7**	**203**	**210**	**6**	**206**	**212**
55	Peace River	5	170	175	5	171	176	4	186	190	4	190	194
59	Northern Rockies	2	12	14	2	13	15	3	17	20	2	16	18
Total[3]		**722**	**8,163**	**8,885**	**702**	**8,055**	**8,757**	**719**	**8,291**	**9,010**	**755**	**8,983**	**9,738**

1. Businesses with zero employees are not included in these figures.
2. Data includes Strathcona region prior to 2013
3. Figures do not add to totals because some establishments did not have geographic codes.

Source: BC Stats

TABLE 20. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR BUSINESS COUNTS,[1] BY INDUSTRY

Industry	2007	2008	2009	2010	2011	2012	2013
Manufacturing Industries	**779**	**772**	**751**	**722**	**702**	**719**	**755**
Chemicals and Pharmaceuticals	60	54	52	48	45	45	51
Computer and Electronic Products	247	243	231	221	211	223	231
Aerospace	43	39	39	34	33	39	42
Medical Equipment	304	308	308	300	294	290	297
Other Manufacturing	125	128	121	119	119	122	134
Service Industries	**7,865**	**8,060**	**8,152**	**8,163**	**8,055**	**8,291**	**8,983**
Motion picture production & post production	825	826	771	770	775	781	866
Telecommunications	284	293	287	282	261	280	287
Engineering services	1,810	1,796	1,761	1,760	1,718	1,775	1,877
Computer and related services	3,060	3,181	3,271	3,298	3,246	3,331	3,678
Other services	1,886	1,964	2,062	2,053	2,055	2,124	2,275
High Technology Sector	**8,644**	**8,832**	**8,903**	**8,885**	**8,757**	**9,010**	**9,738**

	% change from previous year					
Industry	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Manufacturing Industries	**-0.9**	**-2.7**	**-3.9**	**-2.8**	**2.4**	**5.0**
Chemicals and Pharmaceuticals	-10.0	-3.7	-7.7	-6.3	0.0	13.3
Computer and Electronic Products	-1.6	-4.9	-4.3	-4.5	5.7	3.6
Aerospace	-9.3	0.0	-12.8	-2.9	18.2	7.7
Medical Equipment	1.3	0.0	-2.6	-2.0	-1.4	2.4
Other Manufacturing	2.4	-5.5	-1.7	0.0	2.5	9.8
Service Industries	**2.5**	**1.1**	**0.1**	**-1.3**	**2.9**	**8.3**
Motion picture production & post production	0.1	-6.7	-0.1	0.6	0.8	10.9
Telecommunications	3.2	-2.0	-1.7	-7.4	7.3	2.5
Engineering services	-0.8	-1.9	-0.1	-2.4	3.3	5.7
Computer and related services	4.0	2.8	0.8	-1.6	2.6	10.4
Other services	4.1	5.0	-0.4	0.1	3.4	7.1
High Technology Sector	**2.2**	**0.8**	**-0.2**	**-1.4**	**2.9**	**8.1**

1. Businesses with zero employees are not included in these figures.
Source: BC Stats and Statistics Canada

TABLE 21. BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR BUSINESS COUNTS, BY INDUSTRY AND BUSINESS SIZE, 2013

	Number of businesses, by number of employees												
Industry	**1-4**	**5-9**	**10-19**	**20-49**	**50-99**	**100-199**	**200-499**	**500-999**	**1,000-1,499**	**1,500 Plus**	**Subtotal**	**None[1]**	**Total**
Manufacturing Industries	**352**	**158**	**94**	**77**	**39**	**20**	**14**	**0**	**1**	**0**	**755**	**764**	**1,519**
Chemicals and Pharmaceuticals	16	7	8	9	7	1	3	0	0	0	51	52	103
Computer and Electronic Products	85	39	37	36	17	11	5	0	1	0	231	290	521
Aerospace	19	8	5	2	2	3	3	0	0	0	42	78	120
Medical Equipment	170	78	23	16	8	2	0	0	0	0	297	165	462
Other Manufacturing	62	26	21	14	5	3	3	0	0	0	134	179	313
Service Industries	**6,394**	**1,082**	**711**	**447**	**212**	**88**	**38**	**5**	**0**	**6**	**8,983**	**32,033**	**41,016**
Motion picture production & post production	703	70	48	21	12	9	3	0	0	0	866	4,615	5,481
Telecommunications	144	45	35	46	7	2	4	0	0	4	287	812	1,099
Engineering services	1,286	209	162	107	81	24	8	0	0	0	1,877	4,059	5,936
Computer and related services	2,675	443	272	165	67	32	17	5	0	2	3,678	13,937	17,615
Other services	1,586	315	194	108	45	21	6	0	0	0	2,275	8,610	10,885
Total for sector	**6,746**	**1,240**	**805**	**524**	**251**	**108**	**52**	**5**	**1**	**6**	**9,738**	**32,797**	**42,535**
Total for all industries	**104,337**	**36,023**	**22,119**	**13,967**	**4,436**	**1,691**	**771**	**175**	**65**	**83**	**183,667**	**758,394**	**942,061**

1. Businesses in this category do not maintain an employee payroll, but may have a workforce consisting of contracted workers or family members. Note that there have been methodological changes to Statistics Canada's *Business Register*—the source of business count data—which have resulted in a substantial increase in the number of businesses with no employees. Figures from earlier editions of the *Profile* report should not be compared with those presented here.
Source: BC Stats and Statistics Canada

TABLE 22. HIGH TECHNOLOGY SECTOR BUSINESS COUNTS,[1] BY PROVINCE AND INDUSTRY, 2013

Industry	BC	Alberta	Saskatchewan	Manitoba	Ontario	Quebec	Canada
Manufacturing Industries	**755**	**582**	**77**	**130**	**2,263**	**1,263**	**5,265**
Chemicals and Pharmaceuticals	51	35	3	11	161	124	408
Computer and Electronic Products	231	180	14	31	923	430	1,856
Aerospace	42	21	0	13	137	87	318
Medical Equipment	297	234	44	53	581	369	1,659
Other Manufacturing	134	112	16	22	461	253	1,024
Service Industries	**8,983**	**13,196**	**1,109**	**956**	**27,301**	**11,669**	**65,656**
Motion picture production & post production	866	154	35	84	1,657	1,065	3,985
Telecommunications	287	202	40	52	826	512	2,034
Engineering services	1,877	4,057	192	159	3,766	1,849	12,606
Computer and related services	3,678	3,770	296	408	17,135	6,052	32,057
Other services	2,275	5,013	546	253	3,917	2,191	14,974
Total for sector	**9,738**	**13,778**	**1,186**	**1,086**	**29,564**	**12,932**	**70,921**
Total for all industries	**183,648**	**168,562**	**42,141**	**39,164**	**424,068**	**256,749**	**1,200,357**

1. Businesses with zero employees are not included in these figures.
Source: BC Stats and Statistics Canada

TABLE 23. SHIPMENTS AND EXPORTS OF BRITISH COLUMBIA HIGH TECHNOLOGY GOODS AND TOTAL PROCESSED GOODS

Value ($000,000)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
High Technology Goods											
Total Shipments[1]	2,156	2,548	2,404	2,758	2,827	2,951	2,574	2,910	2,893	3,137	3,485
Exports	635	687	705	857	869	979	857	873	902	996	1,032
Exports as % of Shipments	29.5	26.9	29.3	31.1	30.7	33.2	33.3	30.0	31.2	31.7	29.6
Total Processed Goods											
Total Shipments[1]	39,772	41,607	42,883	44,480	42,418	39,435	32,964	35,702	38,226	38,914	40,118
Exports of Processed Goods[2]	20,880	23,572	22,579	22,776	21,801	19,647	15,545	17,354	18,886	19,279	21,068
Export Orientation (%)	52.5	56.7	52.7	51.2	51.4	49.8	47.2	48.6	49.4	49.5	52.5

% change from previous year

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
High Technology Goods											
Total Shipments	1.6	18.2	-5.7	14.7	2.5	4.4	-12.8	13.0	-0.6	8.4	11.1
Exports	-7.2	8.1	2.7	21.5	1.4	12.7	-12.4	1.8	3.3	10.4	3.7
Total Processed Goods											
Total Shipments	3.0	4.6	3.1	3.7	-4.6	-7.0	-16.4	8.3	7.1	1.8	3.1
Exports of Processed Goods	-7.3	12.9	-4.2	0.9	-4.3	-9.9	-20.9	11.6	8.8	2.1	9.3

1. Total shipments represent revenues from all production, sales, services and related activities in the manufacturing sector.
2. "Processed goods" excludes selected agricultural, fish, logging, mining and energy products not produced by B.C. manufacturing industries.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

TABLE 24. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS, BY DESTINATION AND MODE OF TRANSPORT

Value ($ million)[1]

Destination	Mode of Transport[2]	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
United States	Land	357.5	352.0	330.8	402.0	430.3	436.7	397.8	347.0	359.6	384.9	389.1
	Sea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3
	Air	149.2	157.2	156.3	185.5	167.5	177.2	183.2	186.5	178.4	224.5	243.2
	Total	**506.7**	**509.3**	**487.1**	**587.5**	**597.8**	**613.9**	**581.0**	**533.5**	**538.1**	**609.4**	**632.5**
Pacific Rim (total)	Land	4.4	1.5	0.6	0.2	8.1	1.9	0.5	0.6	0.2	9.1	12.8
	Sea	2.2	3.4	11.3	5.4	3.3	7.8	7.6	9.5	6.0	15.7	26.2
	Air	35.7	61.3	85.6	88.1	61.9	90.9	75.5	95.1	94.5	96.6	109.1
	Total	**42.3**	**66.3**	**97.4**	**93.7**	**73.3**	**100.5**	**83.6**	**105.2**	**100.7**	**121.4**	**148.0**
Japan	Land	1.7	0.3	0.3	0.2	5.2	0.0	0.0	0.0	0.0	3.3	0.0
	Sea	0.1	0.3	0.1	0.8	0.5	1.3	0.6	0.2	0.7	7.9	3.3
	Air	5.5	10.4	19.6	18.7	10.4	21.9	10.5	9.5	9.8	12.6	18.8
	Total	**7.3**	**11.1**	**20.0**	**19.7**	**16.1**	**23.3**	**11.1**	**9.7**	**10.5**	**23.7**	**22.1**
Pacific Rim (excluding Japan)	Land	2.7	1.2	0.3	0.0	2.9	1.8	0.4	0.6	0.2	5.8	12.8
	Sea	2.1	3.1	11.2	4.6	2.8	6.4	7.0	9.3	5.3	7.8	22.9
	Air	30.2	50.9	66.0	69.3	51.4	69.0	65.1	85.6	84.7	84.0	90.3
	Total	**35.0**	**55.2**	**77.4**	**74.0**	**57.2**	**77.3**	**72.5**	**95.5**	**90.2**	**97.6**	**126.0**
European Union	Land	0.3	5.2	0.5	0.4	1.0	0.5	1.2	1.1	0.3	0.2	0.2
	Sea	7.9	8.3	2.1	3.5	15.7	82.5	21.2	8.4	10.5	9.9	8.9
	Air	43.4	52.5	68.1	102.9	110.3	105.9	101.9	135.4	137.1	135.4	133.9
	Total	**51.6**	**66.0**	**70.7**	**106.8**	**127.1**	**188.8**	**124.3**	**144.9**	**147.8**	**145.5**	**142.9**
All Other Countries	Land	1.3	2.3	0.7	5.2	4.7	4.8	3.1	1.5	1.5	4.8	1.8
	Sea	2.3	2.9	2.0	2.7	4.3	5.1	1.9	10.5	20.6	19.8	23.2
	Air	30.9	39.9	47.3	60.7	61.5	65.6	63.1	77.2	93.2	95.0	83.8
	Total	**34.6**	**45.1**	**49.9**	**68.6**	**70.6**	**75.4**	**68.1**	**89.2**	**115.2**	**119.6**	**108.8**
Total	Land	363.6	361.0	332.5	407.7	444.2	443.8	402.7	350.2	361.5	399.1	403.8
	Sea	12.4	14.7	15.3	11.6	23.4	95.4	30.6	28.4	37.2	45.3	58.5
	Air	259.3	311.0	357.3	437.2	401.2	439.5	423.8	494.2	503.1	551.5	570.0
	Total	**635.2**	**686.6**	**705.1**	**856.5**	**868.8**	**978.7**	**857.1**	**872.8**	**901.8**	**995.9**	**1,032.3**

% of Exports to Destination[3]

Destination	Mode of Transport	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
United States	Land	70.5	69.1	67.9	68.4	72.0	71.1	68.5	65.0	66.8	63.2	61.5
	Sea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Air	29.5	30.9	32.1	31.6	28.0	28.9	31.5	34.9	33.2	36.8	38.4
Pacific Rim (total)	Land	10.4	2.3	0.6	0.2	11.1	1.9	0.6	0.6	0.2	7.5	8.6
	Sea	5.2	5.2	11.6	5.8	4.6	7.8	9.1	9.0	6.0	12.9	17.7
	Air	84.4	92.5	87.9	94.0	84.4	90.4	90.4	90.4	93.8	79.6	73.7
Japan	Land	23.7	2.8	1.5	0.8	32.0	0.2	0.3	0.2	0.3	13.9	0.1
	Sea	1.5	2.7	0.3	4.0	3.3	5.8	5.1	2.3	6.6	33.2	14.9
	Air	74.7	94.4	98.2	95.2	64.6	94.0	94.6	97.5	93.0	52.9	85.0
Pacific Rim (excluding Japan)	Land	7.6	2.2	0.3	0.0	5.1	2.4	0.6	0.6	0.2	6.0	10.1
	Sea	5.9	5.6	14.5	6.2	4.9	8.3	9.7	9.7	5.9	8.0	18.2
	Air	86.5	92.2	85.2	93.7	89.9	89.3	89.7	89.7	93.9	86.1	71.7
European Union	Land	0.7	7.9	0.7	0.4	0.8	0.2	1.0	0.8	0.2	0.2	0.1
	Sea	15.2	12.6	3.0	3.3	12.4	43.7	17.1	5.8	7.1	6.8	6.2
	Air	84.1	79.5	96.3	96.3	86.8	56.1	82.0	93.5	92.7	93.0	93.7
All Other Countries	Land	3.9	5.0	1.3	7.6	6.7	6.3	4.6	1.7	1.3	4.0	1.7
	Sea	6.7	6.4	3.9	3.9	6.1	6.8	2.7	11.8	17.8	16.6	21.3
	Air	89.4	88.6	94.7	88.5	87.1	86.9	92.6	86.5	80.9	79.5	77.0
Total	Land	57.2	52.6	47.2	47.6	51.1	45.3	47.0	40.1	40.1	40.1	39.1
	Sea	1.9	2.1	2.2	1.4	2.7	9.7	3.6	3.3	4.1	4.6	5.7
	Air	40.8	45.3	50.7	51.0	46.2	44.9	49.4	56.6	55.8	55.4	55.2

1. Totals may not equal the sum of Land, Sea and Air due to the fact that some respondents did not fill in the survey completely.
2. Shipments by land to overseas markets represent the export of B.C. produced high technology products transshipped through U.S. Ports such as Seattle or Portland.
3. Percentages may not add to 100 due to rounding.

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 25. TOP 25 BRITISH COLUMBIA HIGH TECHNOLOGY EXPORT COMMODITIES, 2013[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Exports
88033000	Aircraft parts nes	173.2	16.8
85258020	Digital cameras	89.9	8.7
85258010	Television cameras	82.0	7.9
90328900	Automatic regulating or controlling instruments and apparatus, nes	72.3	7.0
90189000	Instruments and appliances used in medical or veterinary sciences, nes	51.2	5.0
88023000	Aircraft nes of an unladen weight > 2,000 kg but not exceeding 15,000 kg	41.9	4.1
84715000	Process units, o/t 8471.41/.49, w/n cntg in same housing storage, input, output units	41.4	4.0
90213900	Artificial parts of the body, nes	37.0	3.6
90158000	Surveying, hydrographic, oceanographic, meteorological or geophysical inst nes	31.1	3.0
84733000	Parts and accessories of automatic data processing machines & units thereof	24.5	2.4
90181200	Ultrasonic scanning apparatus	21.9	2.1
84119100	Parts of turbo-jets or turbo-propellers	20.2	2.0
90221400	Apparatus based on the use of X-rays for medical, surgical, or vet uses, nes	18.4	1.8
84714100	Other automatic data processing machines, with at least cpu, input and output units, o/t portable	18.0	1.7
28444019	Radioactive elements & isotopes and compounds, nes	15.8	1.5
88032000	Aircraft under-carriages and parts thereof	15.6	1.5
85177000	Parts, of TV sets, incl for cell/wireless networks, oth app for trans/recep of voice/img/data	13.3	1.3
90304000	Instruments and apparatus, specially designed for telecommunications nes	13.0	1.3
85176211	Telephonic or telegraphic switching apparatus	12.7	1.2
88021200	Helicopters of an unladen weight exceeding 2,000 kg	12.6	1.2
90278000	Instruments and apparatus for physical or chemical analysis, nes	11.2	1.1
85431000	Particle accelerators, nes	10.5	1.0
84714900	Other digital automatic data processing machines, presented in the form of systems	9.6	0.9
84705000	Cash registers	9.5	0.9
85269200	Radio remote control apparatus	9.0	0.9
Subtotal		**855.9**	**82.9**
	All Other High Technology Commodities	176.4	17.1
Total		**1,032.3**	**100.0**

HS code = Harmonized System commodity code; nes = Not Elsewhere Specified

1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain some abbreviations that have been left in the original form in this table.

[P] Preliminary

Source: BC Stats and Statistics Canada

TABLE 26. TOP 25 BRITISH COLUMBIA HIGH TECHNOLOGY IMPORT COMMODITIES, 2013[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Imports
8517120020	Cellular telephones, other than for installation in motor vehicles	611.8	11.0
8471300000	Portable automatic data processing machines, <= 10 kg, with cpu, keyboard and display	522.2	9.4
8517620090	Machines for r/c/t or regenertation voice, images or data, incl switching & routing app,nes	325.7	5.9
8471500090	Processing units,o/t 8471.41/.49,w/n cntg: storage/input/output unit,o/t CRT,nes	236.1	4.3
3004900079	Medicaments, nes, for human use, in dosage	198.8	3.6
8443990090	Other parts and accessories of printing machinery, nes	183.4	3.3
8803300000	Parts of airplanes or helicopters nes	176.3	3.2
8528723300	Television receivers, colour, high definition, with flat panel screen, nes	161.9	2.9
3002100090	Antisera,other blood fract,immunological prod,w/n mod/obt biotechnological proc,nes	128.5	2.3
8411910020	Parts of turbo-jets or turbo-propellers for aircraft	116.2	2.1
8525800050	Digital cameras and video camera recorders	102.7	1.8
8517700090	Parts tel sets; oth app for trans/recep voice/img/data, o/t 84.43,85.25,85.27,85.28, nes[2]	84.4	1.5
8473309000	Parts & access (o/t printed circuit assy) of the machines of heading 84.71, nes[3]	78.1	1.4
8471700013	Magnetic disc drives for hard magnetic disks, other than in form of system	75.4	1.4
8542310012	MIC, digital, for mounted silicon MOS tech, other than memory, microprocessor int data bus => 32 bits	68.7	1.2
8542310022	Other monolithic integrated circuits,digital,unmtd chips,dice or wafers,of silicon, nes	66.4	1.2
8471410090	Other digital auto data process mach containting CPU, input & output, other than CRT, nes	64.5	1.2
8411120010	Turbo-jets, for aircraft turbines, of a thrust exceeding 25 kN	60.7	1.1
8528712000	TV reception apparatus, set-top boxes with communication function, etc.	56.2	1.0
8443310000	Machines performing two or more functions of prntg/cpyg/fax, conn to adpm or network	55.9	1.0
8803200000	Under-carriages and parts thereof, for aircraft	49.5	0.9
8528510000	Other monitors, of a kind used in an automatic data processing system of hd 84.71	47.1	0.8
8471700090	Other storage units, o/t presented in form of system, nes	45.3	0.8
8523491090	Optical media,for reproducing phenomena o/t sound/image,nes; other software,nes	44.9	0.8
3002100029	Antisera & o blood fract, human orig, therapeutic/prophylactic use in humans,nes	44.8	0.8
Subtotal		**3,605.6**	**64.9**
	All Other High Technology Commodities	1,949.5	35.1
Total		**5,555.1**	**100.0**

HS code = Harmonized System commodity code; nes=Not Elsewhere Specified

1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain some abbreviations that have been left in the original form in this table.

2. Refers to facsimile machines, transmission/reception apparatus for radio/TV broadcasting.

3. Refers to automatic data processing machines, magnetic or optical readers, etc.

[P] Preliminary

Source: BC Stats

TABLE 27. BRITISH COLUMBIA DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS AND TOTAL GOODS, BY DESTINATION

Value ($000,000)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
High Technology Exports											
United States	506.7	509.3	487.1	587.5	597.8	613.9	581.0	533.5	538.1	609.4	632.5
Mexico	1.9	3.6	4.7	4.8	7.8	6.8	6.1	7.3	6.3	10.6	5.4
European Union	51.6	66.0	70.7	106.8	127.1	188.8	124.3	144.9	147.8	145.5	142.9
United Kingdom	16.0	19.3	15.4	17.0	19.2	24.3	20.0	23.4	27.1	21.9	16.2
France	4.7	9.5	7.9	5.9	5.0	6.5	5.9	6.3	6.4	5.1	7.9
Germany	8.0	9.5	10.4	14.6	40.4	79.3	26.3	28.4	29.8	34.9	31.2
Italy	3.6	4.6	9.4	22.5	21.9	23.1	26.6	33.7	26.5	20.2	22.3
Netherlands	3.4	6.0	6.8	6.5	8.8	11.5	12.6	15.5	14.4	16.6	28.3
Pacific Rim	42.3	66.3	97.4	93.7	73.3	100.5	83.6	105.2	100.7	121.4	148.0
Hong Kong	6.2	10.9	14.9	9.8	5.0	8.6	14.7	20.9	18.9	17.3	14.7
Mainland China	10.3	14.5	23.3	17.6	14.4	21.6	13.7	21.3	19.5	20.7	25.3
Japan	7.3	11.1	20.0	19.7	16.1	23.3	11.1	9.7	10.5	23.7	22.1
South Korea	2.5	7.6	8.1	10.6	6.6	14.1	8.7	7.3	10.7	13.5	14.1
Taiwan	5.8	3.1	7.5	7.1	5.7	6.0	2.8	4.2	7.4	5.9	8.4
All Other Countries	32.7	41.5	45.2	63.8	62.7	68.7	62.0	81.9	108.9	109.0	103.4
Total	**635.2**	**686.6**	**705.1**	**856.5**	**868.8**	**978.7**	**857.1**	**872.8**	**901.8**	**995.9**	**1,032.3**
Total Exports											
United States	18,793.2	20,137.4	22,101.5	20,517.3	19,076.8	17,582.0	12,920.2	13,252.1	14,005.4	14,031.0	15,522.2
Mexico	108.6	198.4	237.0	185.3	195.8	343.6	162.1	192.3	156.1	101.2	124.6
European Union	1,883.6	2,187.0	2,454.1	2,257.8	2,321.0	2,618.8	1,690.2	2,023.3	2,321.3	1,793.3	1,570.9
United Kingdom	305.6	341.3	421.0	386.2	401.3	405.2	266.2	293.7	417.5	328.4	336.5
France	165.2	180.5	189.5	152.4	167.8	201.5	116.8	98.8	108.6	75.3	71.0
Germany	380.6	428.3	470.6	443.3	463.5	516.3	234.0	379.2	280.9	247.9	224.1
Italy	467.0	463.0	565.9	471.1	431.6	485.3	342.6	451.8	515.2	326.8	280.0
Netherlands	228.0	325.1	300.7	368.9	405.1	477.0	438.3	442.3	619.5	520.8	301.4
Pacific Rim	6,636.0	7,470.6	8,077.5	9,037.7	8,605.6	10,666.4	9,128.1	11,569.4	14,022.6	13,651.5	14,337.9
Hong Kong	179.8	252.1	213.2	199.2	166.3	237.9	210.0	238.2	260.5	218.6	201.1
Mainland China	919.5	1,225.4	1,325.5	1,485.6	1,722.8	1,961.7	2,501.4	3,837.1	4,802.4	5,752.3	6,606.9
Japan	3,660.0	3,805.1	4,163.8	4,709.8	4,134.5	5,026.1	3,551.0	4,193.2	4,642.8	4,139.2	4,050.8
South Korea	777.4	909.6	1,167.7	1,364.6	1,307.8	1,960.8	1,664.1	1,883.7	2,725.4	1,891.4	1,816.2
Taiwan	433.0	486.7	498.7	520.7	462.3	598.2	463.1	493.8	723.6	655.5	600.1
All Other Countries	844.0	1,014.5	1,297.2	1,467.9	1,324.5	1,913.3	1,339.7	1,609.0	2,166.1	1,906.7	1,870.4
Total	**28,265.3**	**31,007.8**	**34,167.3**	**33,466.0**	**31,523.6**	**33,124.1**	**25,240.3**	**28,646.1**	**32,671.5**	**31,483.6**	**33,426.0**

% change from previous year

	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
High Technology Exports										
United States	0.5	-4.3	20.6	1.8	2.7	-5.4	-8.2	0.9	13.2	3.8
Mexico	88.7	31.4	2.8	62.6	-13.8	-9.2	19.2	-14.0	69.5	-48.9
European Union	27.8	7.1	51.1	19.0	48.6	-34.1	16.6	2.0	-1.6	-1.8
United Kingdom	20.6	-20.6	10.4	13.2	26.3	-17.6	17.1	15.9	-19.1	-26.4
France	102.7	-17.2	-24.8	-15.3	28.5	-8.2	5.2	3.1	-20.5	54.9
Germany	18.4	9.8	40.3	176.5	96.3	-66.9	8.3	4.9	16.9	-10.7
Italy	26.7	104.2	140.0	-2.6	5.5	15.1	26.3	-21.2	-24.0	10.5
Netherlands	75.4	13.6	-4.2	35.8	30.8	9.2	23.2	-7.3	15.0	70.7
Pacific Rim	56.7	46.9	-3.8	-21.7	37.1	-16.8	25.8	-4.3	20.6	22.0
Hong Kong	74.6	37.0	-34.0	-48.9	72.2	70.1	41.8	-9.4	-8.4	-15.2
Mainland China	40.6	60.7	-24.1	-18.6	50.0	-36.3	54.7	-8.2	6.2	22.1
Japan	50.5	80.8	-1.5	-18.1	44.3	-52.5	-12.1	7.9	126.2	-7.0
South Korea	205.8	6.0	30.6	-37.2	112.0	-38.5	-15.3	46.0	25.8	4.4
Taiwan	-46.0	139.9	-5.3	-19.0	5.3	-54.1	50.2	78.1	-19.9	41.5
All Other Countries	27.0	8.9	41.1	-1.6	9.5	-9.7	32.1	33.0	0.0	-5.1
Total Growth	**8.1**	**2.7**	**21.5**	**1.4**	**12.7**	**-12.4**	**1.8**	**3.3**	**10.4**	**3.7**
Total Exports										
United States	7.2	9.8	-7.2	-7.0	-7.8	-26.5	2.6	5.7	0.2	10.6
Mexico	82.7	19.5	-21.8	5.7	75.5	-52.8	18.6	-18.8	-35.2	23.1
European Union	16.1	12.2	-8.0	2.8	12.8	-35.5	19.7	14.7	-22.7	-12.4
United Kingdom	11.7	23.3	-8.3	3.9	1.0	-34.3	10.3	42.2	-21.3	2.4
France	9.3	5.0	-19.6	10.1	20.1	-42.0	-15.5	9.9	-30.6	-5.8
Germany	12.5	9.9	-5.8	4.6	11.4	-54.7	62.1	-25.9	-11.7	-9.6
Italy	-0.9	22.2	-16.7	-8.4	12.4	-29.4	31.9	14.0	-36.6	-14.3
Netherlands	42.6	-7.5	22.7	9.8	17.8	-8.1	0.9	40.0	-15.9	-42.1
Pacific Rim	12.6	8.1	11.9	-4.8	23.9	-14.4	26.7	21.2	-2.6	5.0
Hong Kong	40.2	-15.5	-6.5	-16.5	43.0	-11.7	13.4	9.3	-16.1	-8.0
Mainland China	33.3	8.2	12.1	16.0	13.9	27.5	53.4	25.2	19.8	14.9
Japan	4.0	9.4	13.1	-12.2	21.6	-29.3	18.1	10.7	-10.8	-2.1
South Korea	17.0	28.4	16.9	-4.2	49.9	-15.1	13.2	44.7	-30.6	-4.0
Taiwan	12.4	2.5	4.4	-11.2	29.4	-22.6	6.6	46.5	-9.4	-8.5
All Other Countries	20.2	27.9	13.2	-9.8	44.5	-30.0	20.1	34.6	-12.0	-1.9
Total Growth	**9.7**	**10.2**	**-2.1**	**-5.8**	**5.1**	**-23.8**	**13.5**	**14.1**	**-3.6**	**6.2**

[r] Revised [p] Preliminary

Source: BC Stats and Statistics Canada

TABLE 28. BRITISH COLUMBIA IMPORTS OF HIGH TECHNOLOGY GOODS, BY COUNTRY OF ORIGIN

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
United States	1,727.1	1,602.7	1,665.5	1,472.9	1,555.1	1,610.1	1,302.3	1,371.8	1,428.2	1,461.8	1,496.9
Mexico	227.8	278.3	328.3	402.4	500.1	543.6	455.0	620.0	632.6	540.7	571.0
European Union	495.6	416.8	375.2	398.4	405.5	500.6	503.0	539.0	567.3	556.5	608.6
United Kingdom	141.7	128.0	104.0	92.0	97.1	114.1	128.9	125.6	135.0	115.1	115.9
France	128.6	80.7	51.9	67.0	67.8	81.5	75.4	81.6	81.6	71.5	76.5
Germany	76.9	87.5	92.3	99.4	97.4	128.9	107.5	108.3	130.5	147.9	171.6
Italy	37.9	23.1	15.2	22.6	19.3	16.9	20.7	27.0	27.5	29.4	36.1
Netherlands	12.8	12.4	14.5	9.8	16.9	30.6	30.6	35.3	33.3	18.7	20.4
Pacific Rim	1,117.2	1,270.0	1,482.7	1,579.7	1,891.1	2,059.1	1,768.5	2,270.2	2,529.4	2,525.2	2,593.8
Hong Kong	10.8	6.3	9.7	10.9	11.1	12.5	11.2	9.9	4.4	3.9	3.1
Mainland China	339.0	487.0	666.0	787.0	969.7	1,108.9	1,041.7	1,406.4	1,601.4	1,709.3	1,683.5
Japan	242.7	248.7	282.0	234.4	262.0	265.9	191.0	232.0	233.2	248.6	229.3
South Korea	122.7	130.6	116.3	101.2	115.9	142.5	129.6	152.5	146.5	87.4	185.3
Taiwan	118.1	115.4	115.7	114.2	148.0	138.4	104.0	144.2	232.7	174.2	176.7
All Other Countries	183.1	196.2	339.9	224.7	287.5	258.5	215.2	253.0	226.0	246.4	284.9
Total Value	**3,750.7**	**3,764.1**	**4,191.7**	**4,078.2**	**4,639.3**	**4,971.9**	**4,244.0**	**5,054.0**	**5,383.5**	**5,330.6**	**5,555.1**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
United States	-7.2	3.9	-11.6	5.6	3.5	-19.1	5.3	4.1	2.4	2.4	
Mexico	22.2	18.0	22.6	24.3	8.7	-16.3	36.3	2.0	-14.5	5.6	
European Union	-15.9	-10.0	6.2	1.8	23.5	0.5	7.1	5.3	-1.9	9.4	
United Kingdom	-9.7	-18.8	-11.5	5.6	17.4	13.0	-2.6	7.5	-14.7	0.8	
France	-37.2	-35.7	29.1	1.2	20.2	-7.5	8.2	0.0	-12.3	6.9	
Germany	13.8	5.4	7.6	-1.9	32.3	-16.6	0.7	20.5	13.3	16.0	
Italy	-39.1	-34.0	48.0	-14.2	-12.7	22.8	30.3	1.9	6.9	22.5	
Netherlands	-3.5	17.3	-32.3	72.1	80.7	0.1	15.4	-5.7	-43.7	8.7	
Pacific Rim	13.7	16.8	6.5	19.7	8.9	-14.1	28.4	11.4	-0.2	2.7	
Hong Kong	-41.6	53.7	12.4	1.7	12.5	-10.3	-11.0	-56.0	-11.9	-20.4	
Mainland China	43.7	36.7	18.2	23.2	14.4	-6.1	35.0	13.9	6.7	-1.5	
Japan	2.5	13.4	-16.9	11.8	1.5	-28.2	21.5	0.5	6.6	-7.8	
South Korea	6.5	-10.9	-13.0	14.6	22.9	-9.0	17.7	-4.0	-40.3	111.8	
Taiwan	-2.2	0.3	-1.3	29.5	-6.5	-24.8	38.6	61.3	-25.1	1.4	
All Other Countries	7.2	73.2	-33.9	27.9	-10.1	-16.8	17.6	-10.7	9.0	15.6	
Total Growth	**0.4**	**11.4**	**-2.7**	**13.8**	**7.2**	**-14.6**	**19.1**	**6.5**	**-1.0**	**4.2**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 29. BRITISH COLUMBIA BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS, BY COUNTRY

	Balance ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
United States	-998.9	-862.6	-932.7	-656.4	-889.6	-996.2	-721.2	-838.3	-887.7	-852.3	-864.3
Mexico	-224.1	-271.3	-320.2	-391.9	-488.1	-534.3	-448.2	-612.4	-624.8	-529.0	-562.9
European Union	-408.5	-306.8	-240.3	-201.9	-237.7	-281.2	-359.3	-380.3	-388.5	-370.7	-413.4
United Kingdom	-111.2	-86.6	-68.9	-62.6	-71.8	-80.4	-102.4	-98.0	-103.2	-89.0	-93.8
France	-123.5	-67.8	-42.0	-37.6	-61.8	-74.1	-67.6	-74.8	-72.6	-64.0	-66.6
Germany	-64.1	-73.4	-61.7	-55.2	-40.0	-39.8	-78.4	-76.5	-96.7	-101.4	-114.2
Italy	-34.0	-17.9	-5.8	0.3	2.8	6.8	6.1	6.8	-0.8	-9.1	-13.0
Netherlands	-7.1	-5.7	0.2	5.0	1.8	-15.4	-17.1	-17.9	-14.5	0.7	17.9
Pacific Rim	-954.0	-1,031.0	-1,180.5	-1,302.8	-1,636.2	-1,873.0	-1,649.9	-2,134.3	-2,361.8	-2,353.5	-2,398.5
Hong Kong	27.7	42.4	69.5	45.3	32.1	10.6	6.9	16.5	27.7	23.7	17.0
Mainland China	-306.8	-458.1	-630.3	-753.9	-921.9	-1,067.6	-1,022.7	-1,379.6	-1,572.1	-1,681.5	-1,650.3
Japan	-213.3	-214.9	-231.8	-190.6	-225.7	-237.0	-177.3	-220.2	-220.6	-221.8	-200.3
South Korea	-113.4	-108.3	-99.4	-81.1	-101.3	-123.0	-118.7	-141.2	-132.2	-72.8	-170.3
Taiwan	-110.2	-105.7	-98.7	-99.2	-136.9	-129.5	-100.5	-138.0	-224.2	-167.9	-167.5
All Other Countries	-144.0	-128.5	-243.6	-125.2	-167.6	-164.4	-64.6	-138.1	-70.4	-100.2	-101.3
Total	**-2,729.5**	**-2,600.2**	**-2,917.3**	**-2,678.2**	**-3,419.3**	**-3,849.2**	**-3,243.2**	**-4,103.4**	**-4,333.1**	**-4,205.8**	**-4,340.3**

Note: The trade balance is the net of total exports minus total imports. Total exports include re-exports, whereas domestic exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 30. BRITISH COLUMBIA DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	2.0	4.3	7.9	7.2	4.1	2.9	3.5	3.1	2.5	3.9	3.8
Life Sciences	200.8	210.6	140.2	179.4	132.7	132.0	141.2	151.1	157.3	151.6	175.3
Opto-Electronics	35.3	34.0	35.7	37.1	49.7	124.2	48.3	39.1	41.6	34.0	40.1
Computers and Telecommunications	243.1	259.4	286.4	345.0	395.9	406.6	394.4	406.6	377.1	389.7	394.5
Electronics	4.1	8.9	15.4	14.1	6.4	11.9	34.7	5.7	12.5	29.3	21.3
Computer Integrated Manufacturing	62.5	97.5	104.1	101.0	94.0	109.8	89.8	99.9	119.8	134.5	109.4
Material Design	1.5	1.4	1.9	2.1	2.7	1.5	1.4	1.4	1.1	3.6	3.8
Aerospace	84.0	69.1	109.6	170.4	182.9	189.4	141.3	164.1	185.4	247.1	281.2
Weapons and Nuclear	2.0	1.4	4.1	0.2	0.4	0.5	2.7	1.9	4.5	2.3	2.9
Total	**635.2**	**686.6**	**705.1**	**856.5**	**868.8**	**978.7**	**857.1**	**872.8**	**901.8**	**995.9**	**1,032.3**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Biotechnology	112.5	83.9	-8.5	-43.8	-29.8	22.1	-10.1	-18.6	52.9	-1.5	
Life Sciences	4.9	-33.4	28.0	-26.0	-0.6	7.0	7.0	4.1	-3.6	15.6	
Opto-Electronics	-3.6	4.9	4.1	33.9	149.8	-61.2	-19.0	6.4	-18.4	18.1	
Computers and Telecommunications	6.7	10.4	20.5	14.7	2.7	-3.0	3.1	-7.2	3.3	1.2	
Electronics	114.3	72.9	-8.4	-54.5	85.7	192.0	-83.6	118.7	135.1	-27.2	
Computer Integrated Manufacturing	56.1	6.7	-3.0	-7.0	16.9	-18.2	11.2	20.0	12.2	-18.6	
Material Design	-3.5	29.5	13.5	27.1	-44.0	-8.9	-0.9	-18.1	224.9	3.6	
Aerospace	-17.8	58.7	55.5	7.3	3.5	-25.4	16.1	13.0	33.3	13.8	
Weapons and Nuclear	-29.9	191.0	-96.3	174.8	13.3	473.1	-31.2	142.5	-50.0	29.2	
Total	**8.1**	**2.7**	**21.5**	**1.4**	**12.7**	**-12.4**	**1.8**	**3.3**	**10.4**	**3.7**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 31. BRITISH COLUMBIA IMPORTS OF HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	46.8	34.3	35.3	43.8	59.9	84.9	100.9	134.4	153.1	164.1	215.7
Life Sciences	462.8	455.6	475.2	496.7	506.0	603.5	602.3	684.0	671.1	726.9	729.8
Opto-Electronics	106.3	123.5	205.1	299.6	337.9	403.7	285.7	347.9	328.3	279.9	263.3
Computers and Telecommunications	2,254.7	2,394.1	2,425.3	2,359.8	2,750.2	2,816.7	2,346.9	2,875.4	3,160.6	3,123.2	3,173.7
Electronics	173.9	140.5	245.6	253.2	253.6	278.3	269.7	364.4	358.6	311.1	374.1
Computer Integrated Manufacturing	205.2	188.5	181.8	195.8	159.6	149.2	143.7	172.7	211.8	198.5	189.9
Material Design	20.0	26.6	17.1	24.3	18.0	29.1	21.4	26.5	35.4	37.9	39.2
Aerospace	449.4	361.5	590.9	385.3	537.2	588.4	453.3	429.4	438.8	466.8	547.6
Weapons and Nuclear	31.7	39.5	15.3	19.7	16.8	18.4	20.0	19.3	25.6	22.1	21.9
Total	**3,750.7**	**3,764.1**	**4,191.7**	**4,078.2**	**4,639.3**	**4,971.9**	**4,244.0**	**5,054.0**	**5,383.5**	**5,330.6**	**5,555.1**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Biotechnology	-26.7	3.1	24.0	36.8	41.8	18.8	33.2	13.9	7.2	31.4	
Life Sciences	-1.5	4.3	4.5	1.9	19.3	-0.2	13.6	-1.9	8.3	0.4	
Opto-Electronics	16.2	66.1	46.0	12.8	19.5	-29.2	21.7	-5.6	-14.8	-5.9	
Computers and Telecommunications	6.2	1.3	-2.7	16.5	2.4	-16.7	22.5	9.9	-1.2	1.6	
Electronics	-19.2	74.9	3.1	0.2	9.7	-3.1	35.1	-1.6	-13.2	20.2	
Computer Integrated Manufacturing	-8.1	-3.6	7.7	-18.5	-6.5	-3.6	20.2	22.6	-6.3	-4.3	
Material Design	33.1	-35.7	42.0	-26.0	61.5	-26.2	23.6	33.7	7.1	3.2	
Aerospace	-19.6	63.5	-34.8	39.4	9.5	-23.0	-5.3	2.2	6.4	17.3	
Weapons and Nuclear	24.6	-61.2	28.3	-14.5	9.2	8.9	-3.4	32.7	-13.8	-1.0	
Total	**0.4**	**11.4**	**-2.7**	**13.8**	**7.2**	**-14.6**	**19.1**	**6.5**	**-1.0**	**4.2**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 32. BRITISH COLUMBIA BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

	Balance ($000,000)										
	2002	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-51.6	-44.7	-30.0	-27.3	-36.6	-55.8	-82.1	-97.4	-131.2	-150.5	-160.2	-211.8
Life Sciences	-292.5	-256.2	-237.5	-325.6	-310.8	-367.6	-467.1	-457.2	-528.8	-508.2	-570.5	-549.2
Opto-Electronics	-42.8	-69.4	-86.7	-165.6	-258.5	-286.3	-277.7	-233.7	-306.0	-283.3	-244.2	-219.2
Computers and Telecommunications	-1,807.2	-1,935.9	-2,060.7	-2,046.7	-1,905.6	-2,296.5	-2,377.2	-1,923.7	-2,433.5	-2,728.3	-2,692.7	-2,736.5
Electronics	-4.2	68.1	171.5	116.2	91.6	-56.8	-210.4	-228.1	-351.9	-337.2	-275.1	-347.2
Computer Integrated Manufacturing	-139.1	-133.3	-80.1	-67.7	-80.6	-58.9	-35.2	-51.6	-70.3	-89.5	-62.2	-78.1
Material Design	-22.9	-16.6	-24.8	-13.2	-21.0	-14.4	-27.4	-19.9	-24.9	-34.2	-34.2	-35.3
Aerospace	-650.0	-312.5	-217.2	-376.9	-138.4	-267.4	-354.9	-215.0	-239.8	-181.1	-147.1	-144.1
Weapons and Nuclear	-27.1	-28.9	-34.7	-10.5	-18.5	-15.5	-17.2	-16.7	-17.1	-20.7	-19.6	-18.9
Total	**-3,037.4**	**-2,729.5**	**-2,600.2**	**-2,917.3**	**-2,678.2**	**-3,419.3**	**-3,849.2**	**-3,243.2**	**-4,103.4**	**-4,333.1**	**-4,205.8**	**-4,340.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 33. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS TO THE UNITED STATES, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	1.4	1.8	3.3	2.0	1.3	0.3	1.0	0.8	0.4	0.6	0.6
Life Sciences	174.5	172.3	103.4	124.1	79.7	73.6	88.9	85.8	89.2	93.6	111.8
Opto-Electronics	25.3	22.1	19.9	18.7	21.8	25.2	14.1	14.0	18.3	13.0	16.6
Computers and Telecommunications	186.4	197.4	204.2	229.7	277.3	288.7	280.6	259.7	232.1	246.1	235.9
Electronics	2.5	3.2	4.0	3.7	2.6	4.8	31.3	1.2	2.8	7.3	6.7
Computer Integrated Manufacturing	45.4	56.1	62.4	58.3	57.9	65.5	47.4	50.0	58.3	58.7	52.3
Material Design	1.2	1.3	1.5	0.9	0.6	0.8	0.9	0.7	0.8	3.3	3.5
Aerospace	69.2	54.5	88.2	150.0	156.4	154.8	116.0	119.9	134.1	185.3	202.9
Weapons and Nuclear	0.8	0.4	0.2	0.1	0.3	0.3	0.9	1.3	2.2	1.5	2.2
Total	**506.7**	**509.3**	**487.1**	**587.5**	**597.8**	**613.9**	**581.0**	**533.5**	**538.1**	**609.4**	**632.5**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Biotechnology	32.8	82.9	-40.3	-33.3	-79.2	254.5	-21.5	-48.5	49.7	1.4	
Life Sciences	-1.3	-40.0	20.1	-35.8	-7.6	20.8	-3.5	4.0	4.9	19.4	
Opto-Electronics	-12.5	-10.1	-6.1	16.5	15.6	-43.9	-0.5	30.3	-28.7	27.2	
Computers and Telecommunications	5.9	3.4	12.5	20.7	4.1	-2.8	-7.5	-10.6	6.0	-4.1	
Electronics	29.0	25.4	-9.0	-29.9	87.5	547.9	-96.0	126.1	159.4	-8.2	
Computer Integrated Manufacturing	23.5	11.1	-6.5	-0.7	13.1	-27.6	5.5	16.4	0.8	-11.0	
Material Design	12.0	14.6	-41.6	-27.8	20.5	16.0	-19.0	5.7	333.5	6.5	
Aerospace	-21.2	61.8	70.0	4.3	-1.0	-25.1	3.4	11.8	38.2	9.5	
Weapons and Nuclear	-50.2	-43.1	-54.3	181.1	-7.1	217.7	49.5	73.1	-34.1	52.2	
Total	**0.5**	**-4.3**	**20.6**	**1.8**	**2.7**	**-5.4**	**-8.2**	**0.9**	**13.2**	**3.8**	

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 34. B.C. IMPORTS OF HIGH TECHNOLOGY GOODS FROM THE UNITED STATES, BY COMMODITY GROUP

Value ($000,000)											
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	21.6	17.8	17.0	19.2	22.8	24.3	28.4	36.7	47.3	49.9	71.6
Life Sciences	258.7	246.7	237.9	246.8	252.2	251.2	288.1	306.5	313.8	349.5	333.4
Opto-Electronics	32.5	35.8	34.9	40.9	29.0	39.8	20.7	36.2	40.4	16.4	13.8
Computers and Telecommunications	925.1	866.5	828.6	705.1	719.1	686.3	525.8	529.8	563.1	570.2	562.7
Electronics	85.0	69.4	121.6	98.1	98.3	97.1	84.8	120.6	102.5	118.8	124.6
Computer Integrated Manufacturing	131.6	119.1	104.7	123.5	88.5	76.9	73.4	86.6	94.9	83.7	77.8
Material Design	14.3	18.4	11.2	16.2	10.7	20.2	15.2	15.0	16.6	19.3	19.5
Aerospace	236.6	204.6	301.4	211.8	324.6	404.3	254.7	230.1	232.5	242.2	280.3
Weapons and Nuclear	21.7	24.5	8.4	11.4	9.9	10.1	11.1	10.2	17.0	11.8	13.4
Total	**1,727.1**	**1,602.7**	**1,665.5**	**1,472.9**	**1,555.1**	**1,610.1**	**1,302.3**	**1,371.8**	**1,428.2**	**1,461.8**	**1,496.9**
% change from previous year											
		2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology		-17.5	-4.6	13.3	18.7	6.3	17.2	29.1	29.0	5.4	43.4
Life Sciences		-4.6	-3.6	3.7	2.2	-0.4	14.7	6.4	2.4	11.4	-4.6
Opto-Electronics		10.2	-2.4	17.2	-29.2	37.2	-48.0	75.3	11.7	-59.4	-16.2
Computers and Telecommunications		-6.3	-4.4	-14.9	2.0	-4.6	-23.4	0.8	6.3	1.3	-1.3
Electronics		-18.4	75.2	-19.3	0.2	-1.2	-12.7	42.2	-15.0	15.9	4.9
Computer Integrated Manufacturing		-9.5	-12.1	18.0	-28.3	-13.1	-4.5	18.0	9.6	-11.8	-7.1
Material Design		28.0	-39.0	44.6	-34.0	89.4	-24.8	-1.7	10.9	16.0	1.0
Aerospace		-13.5	47.3	-29.7	53.3	24.5	-37.0	-9.7	1.0	4.2	15.7
Weapons and Nuclear		13.2	-65.9	36.3	-12.6	1.4	10.0	-7.7	66.2	-30.7	13.3
Total		**-7.2**	**3.9**	**-11.6**	**5.6**	**3.5**	**-19.1**	**5.3**	**4.1**	**2.4**	**2.4**

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 35. B.C. BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS WITH THE UNITED STATES, BY COMMODITY GROUP

Balance ($000,000)											
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-20.2	-16.0	-13.5	-17.2	-21.5	-24.0	-27.4	-35.9	-46.9	-49.3	-71.0
Life Sciences	-80.2	-68.9	-129.4	-118.2	-171.0	-177.6	-199.2	-220.7	-224.5	-255.8	-221.6
Opto-Electronics	-6.1	-11.5	-11.9	-19.7	-6.5	-14.6	-6.6	-22.2	-22.2	-3.4	2.8
Computers and Telecommunications	-678.9	-608.5	-553.8	-386.9	-408.1	-397.5	-245.1	-270.1	-331.0	-324.1	-326.8
Electronics	24.5	71.4	18.5	12.9	-75.2	-92.3	-53.5	-119.4	-99.7	-111.5	-117.9
Computer Integrated Manufacturing	-77.6	-55.1	-35.4	-56.5	-27.6	-11.4	-26.0	-36.6	-36.7	-25.0	-25.5
Material Design	-11.5	-16.8	-9.5	-14.7	-9.8	-19.5	-14.3	-14.3	-15.8	-16.0	-16.0
Aerospace	-128.3	-133.3	-189.8	-45.3	-160.5	-249.5	-138.8	-110.2	-96.0	-56.9	-77.4
Weapons and Nuclear	-20.7	-23.9	-7.9	-10.8	-9.4	-9.8	-10.2	-8.9	-14.8	-10.3	-11.1
Total	**-998.9**	**-862.6**	**-932.7**	**-656.4**	**-889.6**	**-996.2**	**-721.2**	**-838.3**	**-887.7**	**-852.3**	**-864.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 36. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS TO THE PACIFIC RIM, BY COMMODITY GROUP

Value ($000,000)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	0.1	0.5	0.7	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Life Sciences	4.9	7.7	13.1	13.0	6.6	12.6	11.5	15.7	16.1	16.7	21.7
Opto-Electronics	4.4	4.8	8.7	5.1	4.5	6.1	5.4	8.6	7.5	6.4	9.5
Computers and Telecommunications	20.1	29.4	39.9	45.0	37.1	41.8	45.4	58.6	53.8	51.1	58.3
Electronics	1.1	3.2	10.3	9.3	3.1	5.3	1.4	1.5	0.9	11.3	2.9
Computer Integrated Manufacturing	6.8	14.4	14.7	15.9	9.0	15.9	11.9	12.3	16.9	26.6	20.5
Material Design	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.1
Aerospace	4.0	6.0	6.2	5.0	12.5	18.5	6.1	8.1	5.2	8.9	34.7
Weapons and Nuclear	0.9	0.3	3.8	0.0	0.1	0.1	1.7	0.1	0.0	0.1	0.2
Total	**42.3**	**66.3**	**97.4**	**93.7**	**73.3**	**100.5**	**83.6**	**105.2**	**100.7**	**121.4**	**148.0**
% change from previous year											
		2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011[r]**	**2012[r]**	**2013[p]**
Biotechnology		240.5	44.5	-81.3	-13.7	35.3	28.0	-28.4	6.3	30.3	18.4
Life Sciences		57.7	68.9	-0.5	-49.2	89.9	-8.6	36.8	2.3	4.2	29.4
Opto-Electronics		9.2	82.0	-41.0	-11.7	34.9	-12.1	60.1	-12.9	-14.4	48.9
Computers and Telecommunications		46.2	35.8	12.8	-17.5	12.5	8.6	29.2	-8.1	-5.2	14.2
Electronics		194.3	225.9	-9.4	-66.9	72.9	-74.5	10.8	-41.1	1173.4	-74.5
Computer Integrated Manufacturing		112.3	2.1	8.6	-43.8	77.5	-25.2	3.4	37.1	57.6	-23.0
Material Design		19.5	-43.4	323.2	190.3	-73.5	-6.2	29.2	-33.6	126.8	-37.0
Aerospace		47.9	4.2	-19.9	151.3	48.4	-67.0	32.7	-35.3	69.0	290.8
Weapons and Nuclear		-60.2	1003.7	-99.2	93.5	78.9	1493.3	-92.4	-65.8	50.6	161.7
Total		**56.7**	**46.9**	**-3.8**	**-21.7**	**37.1**	**-16.8**	**25.8**	**-4.3**	**20.6**	**22.0**

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 37. B.C. IMPORTS OF HIGH TECHNOLOGY GOODS FROM THE PACIFIC RIM, BY COMMODITY GROUP

Value ($000,000)											
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	2.0	1.1	0.8	0.7	1.0	0.8	1.2	1.2	5.1	1.5	1.7
Life Sciences	29.3	35.0	38.5	40.4	44.6	59.1	48.9	73.5	74.2	75.9	73.9
Opto-Electronics	59.3	69.8	109.4	120.9	81.7	94.7	65.5	100.8	107.3	102.6	109.5
Computers and Telecommunications	912.3	1,062.7	1,178.7	1,248.6	1,582.9	1,694.1	1,449.3	1,823.9	2,040.3	2,089.0	2,102.8
Electronics	61.9	49.5	89.3	113.5	116.9	139.2	141.1	195.5	204.4	144.1	199.2
Computer Integrated Manufacturing	36.8	30.2	40.1	31.2	35.3	40.0	34.1	45.9	59.9	65.9	57.8
Material Design	1.6	2.0	1.7	2.8	2.0	3.0	2.3	3.2	4.6	4.1	3.5
Aerospace	11.7	17.3	22.4	19.9	24.8	26.4	24.7	24.5	31.1	40.4	43.4
Weapons and Nuclear	2.3	2.4	1.7	1.7	1.8	1.7	1.5	1.7	2.5	1.8	2.0
Total	**1,117.2**	**1,270.0**	**1,482.7**	**1,579.7**	**1,891.1**	**2,059.1**	**1,768.5**	**2,270.2**	**2,529.4**	**2,525.2**	**2,593.8**
% change from previous year											
		2004	**2005**	**2006**	**2007**	**2008**	**2009[r]**	**2010[r]**	**2011[r]**	**2012[r]**	**2013[p]**
Biotechnology		-43.4	-31.9	-7.1	42.6	-18.5	47.4	-4.4	331.7	-70.0	8.9
Life Sciences		19.5	10.1	4.9	10.2	32.6	-17.2	50.3	0.9	2.3	-2.7
Opto-Electronics		17.8	56.6	10.5	-32.4	15.9	-30.8	53.9	6.4	-4.4	6.8
Computers and Telecommunications		16.5	10.9	5.9	26.8	7.0	-14.5	25.9	11.9	2.4	0.7
Electronics		-20.1	80.6	27.1	3.0	19.0	1.4	38.5	4.5	-29.5	38.3
Computer Integrated Manufacturing		-18.1	32.9	-22.2	13.2	13.2	-14.8	34.9	30.5	9.9	-12.2
Material Design		20.0	-12.6	62.4	-26.6	44.6	-23.0	40.6	44.5	-11.1	-15.3
Aerospace		48.2	29.3	-11.4	24.9	6.5	-6.5	-1.0	27.2	30.0	7.2
Weapons and Nuclear		5.2	-27.1	-2.8	6.2	-3.4	-15.9	14.3	46.8	-28.4	14.2
Total		**13.7**	**16.8**	**6.5**	**19.7**	**8.9**	**-14.1**	**28.4**	**11.4**	**-0.2**	**2.7**

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 38. B.C. BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS WITH THE PACIFIC RIM, BY COMMODITY GROUP

	Balance ($000,000)										
	2002	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-2.8	-1.9	-0.7	-0.1	-0.6	-0.9	-0.7	-1.0	-1.0	-4.9	-1.3	-1.4
Life Sciences	-26.6	-23.4	-26.1	-24.9	-26.3	-36.4	-45.1	-36.0	-56.3	-55.1	-57.2	-49.7
Opto-Electronics	-42.2	-54.9	-64.8	-100.5	-115.7	-76.6	-87.8	-59.7	-91.2	-97.3	-95.0	-98.1
Computers and Telecommunications	-695.1	-883.6	-1,028.4	-1,132.2	-1,194.9	-1,537.9	-1,640.7	-1,396.0	-1,755.8	-1,968.0	-2,023.0	-2,033.4
Electronics	-12.7	45.5	83.4	89.7	59.1	34.3	-87.0	-134.4	-188.8	-196.0	-127.5	-191.8
Computer Integrated Manufacturing	-23.0	-29.6	-13.5	-23.9	-14.3	-23.3	-20.5	-21.3	-32.1	-42.4	-38.7	-36.6
Material Design	-2.0	-1.6	-1.9	-1.4	-2.3	-1.7	-2.8	-2.1	-3.0	-4.5	-4.0	-3.3
Aerospace	-0.3	-3.3	23.0	10.5	-6.1	7.9	13.2	0.3	-4.5	8.9	-5.2	17.8
Weapons and Nuclear	-0.2	-1.3	-2.0	2.1	-1.7	-1.6	-1.6	0.4	-1.5	-2.3	-1.7	-1.8
Total	**-804.9**	**-954.0**	**-1,031.0**	**-1,180.5**	**-1,302.8**	**-1,636.2**	**-1,873.0**	**-1,649.9**	**-2,134.3**	**-2,361.8**	**-2,353.5**	**-2,398.5**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 39. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS TO MAINLAND CHINA, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	3.0	2.0	6.2	6.3	2.8	7.4	3.1	7.1	6.6	6.8	7.7
Opto-Electronics	0.2	0.1	0.3	0.2	1.0	0.8	2.3	1.0	0.9	1.1	0.9
Computers and Telecommunications	4.6	9.4	11.9	8.4	8.1	7.3	5.1	9.9	7.2	8.7	12.7
Electronics	0.4	0.2	1.4	0.2	0.3	2.4	0.5	0.5	0.2	0.1	0.2
Computer Integrated Manufacturing	1.5	2.4	3.3	2.4	1.6	2.1	2.0	2.2	4.0	3.3	2.8
Material Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aerospace	0.1	0.3	0.2	0.2	0.5	1.6	0.8	0.5	0.5	0.6	0.9
Weapons and Nuclear	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Total	**10.3**	**14.5**	**23.3**	**17.6**	**14.4**	**21.6**	**13.7**	**21.3**	**19.5**	**20.7**	**25.3**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Biotechnology	523.0	39.9	80.9	-100.0	-	-	-69.5	-100.0	-	27.4	
Life Sciences	-32.3	207.3	1.3	-55.3	164.2	-57.6	125.4	-6.8	2.8	13.2	
Opto-Electronics	-22.5	137.0	-39.5	435.0	-17.6	185.5	-53.5	-12.9	16.4	-16.8	
Computers and Telecommunications	105.9	26.6	-29.4	-3.2	-10.5	-30.2	95.2	-27.1	20.5	45.9	
Electronics	-48.5	645.3	-87.3	102.2	598.9	-81.2	3.4	-51.9	-38.8	22.4	
Computer Integrated Manufacturing	53.7	37.9	-27.7	-33.0	33.6	-5.1	9.4	83.1	-17.1	-15.0	
Material Design	-	-100.0	-	-97.1	-100.0	-	-	-16.2	394.0	-99.7	
Aerospace	458.3	-30.4	-20.0	173.7	217.0	-51.2	-29.5	-2.6	12.4	56.1	
Weapons and Nuclear	-95.6	-100.0	-	178.5	-100.0	-	-100.0	-	-	88.4	
Total	**40.6**	**60.7**	**-24.1**	**-18.6**	**50.0**	**-36.3**	**54.7**	**-8.2**	**6.2**	**22.1**	

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 40. B.C. IMPORTS OF HIGH TECHNOLOGY GOODS FROM MAINLAND CHINA, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.5	0.5	0.5	0.6
Life Sciences	7.9	9.3	6.6	6.4	8.4	13.1	12.5	21.6	18.0	25.0	22.9
Opto-Electronics	28.0	36.3	66.3	76.8	59.9	70.0	47.3	70.9	78.5	67.8	81.0
Computers and Telecommunications	296.3	432.6	578.5	683.6	881.3	1,001.9	954.8	1,273.2	1,463.6	1,571.7	1,528.8
Electronics	3.0	3.9	8.4	11.4	12.1	11.3	11.5	19.0	16.2	19.5	22.5
Computer Integrated Manufacturing	1.8	2.6	3.7	5.6	4.9	7.5	9.2	12.1	12.6	12.5	15.5
Material Design	0.4	0.7	0.7	1.4	0.8	1.5	1.1	1.8	2.8	2.8	2.4
Aerospace	0.8	0.8	0.9	1.2	1.2	2.4	4.2	6.0	7.9	8.3	8.4
Weapons and Nuclear	0.9	0.8	0.7	0.7	1.0	1.0	0.8	1.2	1.2	1.2	1.2
Total	**339.0**	**487.0**	**666.0**	**787.0**	**969.7**	**1,108.9**	**1,041.7**	**1,406.4**	**1,601.4**	**1,709.3**	**1,683.5**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Biotechnology	37.3	66.7	32.9	141.9	44.4	24.0	64.4	0.4	-0.8	12.7	
Life Sciences	16.6	-29.3	-2.4	31.9	55.5	-5.0	73.4	-16.6	39.0	-8.3	
Opto-Electronics	29.7	82.8	15.8	-22.0	16.8	-32.4	49.8	10.8	-13.7	19.5	
Computers and Telecommunications	46.0	33.7	18.2	28.9	13.7	-4.7	33.3	15.0	7.4	-2.7	
Electronics	29.7	118.9	34.8	6.2	-6.3	1.3	66.2	-14.8	20.1	15.5	
Computer Integrated Manufacturing	48.4	44.3	49.4	-12.8	52.7	23.5	31.8	3.7	-0.4	24.0	
Material Design	92.9	5.3	90.1	-40.3	79.0	-24.4	54.9	58.2	1.8	-13.8	
Aerospace	10.6	4.8	34.7	2.8	96.6	77.4	43.3	31.0	4.7	2.1	
Weapons and Nuclear	-1.6	-14.3	-6.6	41.7	8.5	-22.1	48.1	0.8	-5.0	7.0	
Total	**43.7**	**36.7**	**18.2**	**23.2**	**14.4**	**-6.1**	**35.0**	**13.9**	**6.7**	**-1.5**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 41. B.C. BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS WITH MAINLAND CHINA, BY COMMODITY GROUP

	Balance ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-7.9	-9.2	-6.5	-6.3	-8.4	-13.1	-12.4	-21.6	-18.0	-25.0	-22.9
Life Sciences	-25.0	-33.4	-60.1	-70.3	-56.9	-62.3	-43.9	-63.0	-69.8	-59.5	-71.7
Opto-Electronics	-296.1	-432.5	-578.2	-683.4	-879.9	-1,000.6	-952.3	-1,272.0	-1,462.5	-1,570.5	-1,527.9
Computers and Telecommunications	8.0	6.8	5.6	0.4	-2.0	2.2	-4.1	-7.2	-5.8	-8.0	-7.5
Electronics	13.5	8.1	6.6	5.7	26.1	5.1	-6.8	-10.5	-8.9	-9.8	-13.6
Computer Integrated Manufacturing	1.5	3.2	3.2	1.2	0.9	2.9	1.2	1.5	1.4	0.6	0.6
Material Design	-0.8	-0.8	-0.9	-0.8	-1.2	-2.4	-4.2	-6.0	-7.9	-8.2	-8.4
Aerospace	-0.5	-0.4	0.0	-0.3	-0.2	0.7	0.0	-0.2	-0.1	-0.4	1.8
Weapons and Nuclear	-0.2	-0.8	-0.7	-0.7	-0.9	-1.0	-0.8	-1.2	-1.1	-1.1	-1.1
Total	**-306.8**	**-458.1**	**-630.3**	**-753.9**	**-921.9**	**-1,067.6**	**-1,022.7**	**-1,379.6**	**-1,572.1**	**-1,681.5**	**-1,650.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 42. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS TO JAPAN, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	0.1	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	0.8	1.4	1.7	2.1	0.4	0.7	1.1	0.4	0.4	2.7	6.7
Opto-Electronics	1.1	1.3	5.2	1.1	1.5	0.9	0.4	0.7	1.1	1.5	1.7
Computers and Telecommunications	3.1	4.2	5.7	11.3	8.3	9.5	8.5	7.8	7.3	6.6	7.3
Electronics	0.1	0.2	0.2	1.0	0.0	0.8	0.0	0.0	0.1	10.5	1.8
Computer Integrated Manufacturing	0.4	3.1	2.4	3.9	0.6	1.3	0.9	0.6	1.1	1.0	2.7
Material Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aerospace	1.8	0.5	0.6	0.2	5.3	10.1	0.1	0.2	0.5	1.5	1.7
Weapons and Nuclear	0.0	0.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**7.3**	**11.1**	**20.0**	**19.7**	**16.1**	**23.3**	**11.1**	**9.7**	**10.5**	**23.7**	**22.1**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Biotechnology	326.3	52.1	-97.7	-100.0	-	77.5	-100.0	-	-	-	
Life Sciences	73.0	27.8	18.9	-82.7	87.4	63.9	-63.0	4.4	525.2	152.4	
Opto-Electronics	18.3	306.6	-78.6	33.7	-42.2	-54.6	78.3	63.4	33.1	16.0	
Computers and Telecommunications	34.6	36.6	97.2	-26.6	13.8	-10.4	-8.1	-6.9	-8.8	9.7	
Electronics	153.6	-3.3	541.7	-95.5	1716.4	-95.1	-45.0	267.7	12647.2	-82.4	
Computer Integrated Manufacturing	788.7	-23.8	62.1	-85.3	131.5	-29.5	-38.2	91.8	-8.8	171.5	
Material Design	20.7	-83.5	467.7	-34.0	-28.5	118.9	-14.9	-63.9	173.7	105.0	
Aerospace	-73.6	15.5	-55.1	2047.2	89.6	-99.2	149.7	122.7	206.1	18.8	
Weapons and Nuclear	215.1	2422.0	-99.8	0.0	-100.0	-	-	-	-100.0	-	
Total	**50.5**	**80.8**	**-1.5**	**-18.1**	**44.3**	**-52.5**	**-12.1**	**7.9**	**126.2**	**-7.0**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 43. B.C. IMPORTS OF HIGH TECHNOLOGY GOODS FROM JAPAN, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5
Life Sciences	14.4	17.0	21.7	23.8	21.7	26.4	19.6	23.4	25.2	25.5	25.5
Opto-Electronics	19.3	19.9	27.3	18.9	6.6	6.9	4.6	9.1	5.9	6.9	6.7
Computers and Telecommunications	156.0	166.6	172.7	143.1	173.8	172.0	119.7	141.0	131.8	138.2	122.3
Electronics	12.4	9.9	11.6	14.6	15.6	18.0	14.1	21.7	19.5	17.2	20.4
Computer Integrated Manufacturing	29.2	19.5	29.4	16.4	22.2	21.6	15.5	21.9	32.0	35.4	27.4
Material Design	0.9	0.8	0.5	0.9	0.8	1.0	0.7	0.7	0.5	0.7	0.5
Aerospace	9.4	14.0	18.1	16.0	20.7	19.6	16.4	13.6	17.5	24.0	25.7
Weapons and Nuclear	0.9	1.0	0.5	0.5	0.5	0.4	0.2	0.3	0.3	0.3	0.3
Total	**242.7**	**248.7**	**282.0**	**234.4**	**262.0**	**265.9**	**191.0**	**232.0**	**233.2**	**248.6**	**229.3**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Biotechnology	-66.6	-46.4	19.2	44.6	51.5	62.9	25.7	18.7	17.3	18.4	
Life Sciences	18.0	28.1	9.5	-8.8	21.7	-25.7	19.3	7.7	1.0	0.2	
Opto-Electronics	3.0	37.5	-30.6	-65.3	4.8	-32.9	97.6	-35.0	16.6	-3.5	
Computers and Telecommunications	6.8	3.7	-17.2	21.4	-1.0	-30.4	17.8	-6.5	4.9	-11.5	
Electronics	-20.8	17.9	26.1	6.5	15.1	-21.5	53.9	-10.2	-11.7	18.8	
Computer Integrated Manufacturing	-33.0	50.3	-44.0	35.2	-2.9	-28.2	41.3	46.3	10.4	-22.5	
Material Design	-14.3	-35.4	87.4	-10.9	22.5	-32.8	7.4	-24.4	24.4	-31.8	
Aerospace	50.0	29.0	-11.7	29.3	-5.2	-16.3	-17.0	28.4	37.3	7.0	
Weapons and Nuclear	8.9	-48.5	-5.8	5.6	-24.7	-47.0	49.1	-1.6	5.3	3.8	
Total	**2.5**	**13.4**	**-16.9**	**11.8**	**1.5**	**-28.2**	**21.5**	**0.5**	**6.6**	**-7.8**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 44. B.C. BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS WITH JAPAN, BY COMMODITY GROUP

	Balance ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-14.3	-16.7	-21.3	-23.8	-21.7	-26.4	-19.6	-23.4	-25.2	-25.5	-25.5
Life Sciences	-18.0	-18.4	-25.3	-16.4	-5.7	-5.5	-2.9	-8.3	-5.2	-4.1	0.2
Opto-Electronics	-154.9	-165.3	-167.5	-142.0	-172.3	-171.1	-119.3	-140.3	-130.6	-136.1	-118.9
Computers and Telecommunications	-8.7	-5.0	-5.1	-3.0	-5.0	-8.0	-5.2	-13.7	-11.7	-10.3	-12.4
Electronics	-8.4	2.5	-0.5	7.1	-5.1	-16.6	-14.6	-20.7	-31.0	-24.6	-25.1
Computer Integrated Manufacturing	-0.5	2.4	2.0	3.2	-0.2	0.4	0.3	-0.1	0.6	0.4	2.4
Material Design	-9.3	-14.0	-18.1	-16.0	-20.7	-19.6	-16.4	-13.6	-17.5	-24.0	-25.6
Aerospace	1.0	-0.4	0.4	0.3	5.1	9.9	0.5	0.3	0.4	2.8	5.2
Weapons and Nuclear	-0.8	-0.8	3.3	-0.5	-0.5	-0.4	-0.1	-0.3	-0.3	-0.3	-0.3
Total	**-213.3**	**-214.9**	**-231.8**	**-190.6**	**-225.7**	**-237.0**	**-177.3**	**-220.2**	**-220.6**	**-221.8**	**-200.3**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 45. B.C. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS TO THE EUROPEAN UNION, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	0.3	1.0	1.4	0.8	1.1	1.4	1.7	1.9	1.5	2.1	2.6
Life Sciences	17.3	27.0	19.7	32.7	29.0	25.3	28.3	38.2	32.3	25.8	26.1
Opto-Electronics	3.1	3.2	3.6	5.4	18.1	85.6	22.4	9.4	7.8	5.1	5.1
Computers and Telecommunications	20.1	19.1	24.3	48.5	61.8	53.6	48.7	60.6	64.5	59.8	68.2
Electronics	0.2	2.0	0.3	0.6	0.6	0.6	0.6	0.3	0.6	5.1	2.4
Computer Integrated Manufacturing	2.4	8.8	11.0	11.2	8.7	12.4	12.1	17.7	21.3	24.9	19.3
Material Design	0.2	0.1	0.2	0.9	0.5	0.5	0.2	0.4	0.2	0.1	0.1
Aerospace	7.8	4.6	10.3	6.6	7.2	9.3	10.2	16.2	19.1	22.5	19.0
Weapons and Nuclear	0.3	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.1	0.1
Total	**51.6**	**66.0**	**70.7**	**106.8**	**127.1**	**188.8**	**124.3**	**144.9**	**147.8**	**145.5**	**142.9**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Biotechnology	264.1	42.7	-41.1	32.7	28.4	20.4	8.8	-16.5	35.7	21.8	
Life Sciences	55.7	-27.1	66.4	-11.5	-12.6	11.8	35.0	-15.6	-20.1	1.1	
Opto-Electronics	5.9	11.3	49.6	236.3	372.7	-73.8	-58.1	-16.7	-35.0	-0.2	
Computers and Telecommunications	-4.9	27.1	99.5	27.4	-13.2	-9.2	24.6	6.4	-7.3	14.1	
Electronics	783.8	-87.8	154.8	-7.7	0.9	7.2	-53.5	108.0	734.4	-52.8	
Computer Integrated Manufacturing	271.4	25.1	2.3	-22.0	41.7	-2.5	46.4	20.4	16.9	-22.3	
Material Design	-66.8	184.4	429.6	-48.7	1.8	-60.7	102.4	-59.2	-29.4	-47.7	
Aerospace	-40.9	123.1	-36.4	10.2	28.2	10.5	58.2	17.7	17.7	-15.3	
Weapons and Nuclear	-34.0	-93.2	-66.0	645.1	159.8	-4.2	191.2	109.5	-75.8	-0.6	
Total	**27.8**	**7.1**	**51.1**	**19.0**	**48.6**	**-34.1**	**16.6**	**2.0**	**-1.6**	**-1.8**	

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 46. B.C. IMPORTS OF HIGH TECHNOLOGY GOODS FROM THE EUROPEAN UNION, BY COMMODITY GROUP

	Value ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	19.3	14.4	14.1	19.6	30.9	53.3	52.6	59.8	80.1	69.7	84.5
Life Sciences	142.9	127.9	139.2	151.2	144.7	181.1	177.4	205.2	183.1	197.4	199.1
Opto-Electronics	9.3	8.8	13.1	9.0	10.1	16.8	6.1	8.9	11.1	8.4	8.5
Computers and Telecommunications	96.0	103.1	84.7	87.9	95.9	105.1	87.3	90.9	94.3	85.9	89.2
Electronics	13.8	10.9	14.3	14.2	13.3	13.4	10.2	12.9	18.7	15.1	16.1
Computer Integrated Manufacturing	23.8	26.0	25.8	27.4	24.5	23.0	25.1	25.7	40.1	33.6	37.7
Material Design	2.5	2.6	1.9	2.0	2.8	3.5	1.4	1.5	1.9	3.4	2.6
Aerospace	182.5	113.5	78.9	82.3	79.8	100.2	137.5	130.5	133.6	137.4	166.6
Weapons and Nuclear	5.4	9.7	3.2	4.7	3.5	4.2	5.5	3.6	4.4	5.5	4.2
Total	**495.6**	**416.8**	**375.2**	**398.4**	**405.5**	**500.6**	**503.0**	**539.0**	**567.3**	**556.5**	**608.6**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Biotechnology	-25.3	-2.4	39.7	57.2	72.6	-1.2	13.7	33.8	-12.9	21.3	
Life Sciences	-10.5	8.8	8.7	-4.3	25.2	-2.1	15.7	-10.8	7.9	0.9	
Opto-Electronics	-6.1	49.1	-31.2	12.0	66.3	-63.6	45.4	25.1	-24.2	0.9	
Computers and Telecommunications	7.3	-17.8	3.7	9.1	9.6	-17.0	4.1	3.8	-9.0	3.9	
Electronics	-20.9	31.7	-1.0	-6.6	1.0	-24.0	26.6	45.2	-19.2	6.6	
Computer Integrated Manufacturing	9.3	-0.5	6.0	-10.5	-6.3	9.1	2.7	55.8	-16.3	12.4	
Material Design	5.1	-29.2	10.2	35.5	25.6	-59.4	7.7	26.3	77.3	-24.5	
Aerospace	-37.8	-30.5	4.3	-3.0	25.6	37.2	-5.1	2.4	2.9	21.2	
Weapons and Nuclear	77.6	-66.5	46.6	-26.2	19.1	30.7	-34.4	22.6	26.3	-23.7	
Total	**-15.9**	**-10.0**	**6.2**	**1.8**	**23.5**	**0.5**	**7.1**	**5.3**	**-1.9**	**9.4**	

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 47. B.C. BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS WITH THE EUROPEAN UNION, BY COMMODITY GROUP

	Balance ($000,000)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Biotechnology	-19.0	-13.4	-12.7	-18.8	-29.8	-51.9	-50.9	-58.0	-78.5	-67.6	-82.0
Life Sciences	-125.5	-100.7	-117.1	-118.1	-114.9	-154.4	-148.5	-166.0	-150.3	-171.1	-172.7
Opto-Electronics	-6.0	-5.3	-9.3	-3.1	8.1	69.3	19.0	1.1	-3.0	-3.1	-2.2
Computers and Telecommunications	-70.4	-78.5	-49.7	-32.2	-24.2	-38.7	-33.2	-23.7	-9.9	-12.1	-4.9
Electronics	8.2	22.2	22.3	40.2	3.4	-6.8	-9.3	-12.4	-17.6	-9.4	-13.2
Computer Integrated Manufacturing	-21.4	-17.0	-13.8	-11.8	-15.3	-10.4	-11.9	-7.5	-17.7	-8.2	-17.7
Material Design	-2.2	-2.5	-1.1	-0.9	-1.6	-2.9	-1.2	-1.1	-1.8	-3.3	-2.5
Aerospace	-167.5	-102.2	-56.3	-53.1	-60.5	-81.9	-118.3	-109.6	-106.1	-90.7	-114.2
Weapons and Nuclear	-4.7	-9.4	-2.7	-4.2	-2.9	-3.4	-4.9	-3.0	-3.6	-5.2	-4.0
Total	**-408.5**	**-306.8**	**-240.3**	**-201.9**	**-237.7**	**-281.2**	**-359.3**	**-380.3**	**-388.5**	**-370.7**	**-413.4**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within B.C. only).
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 48. BRITISH COLUMBIA EXPORTS OF HIGH TECHNOLOGY SERVICES

BRITISH COLUMBIA

Value ($ millions)

	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Computer-Related	898	892	1,239	1,120	1,190	1,206	1,225
Professional, Scientific and Technical	1,041	955	1,032	1,219	1,329	1,429	1,483
Other Services	396	364	409	558	626	663	707
Total	**2,335**	**2,211**	**2,680**	**2,897**	**3,145**	**3,298**	**3,416**

% change from previous year

		2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Computer-Related		-0.6	38.9	-9.6	6.2	1.4	1.6
Professional, Scientific and Technical		-8.3	8.1	18.1	9.1	7.5	3.8
Other Services		-7.9	12.3	36.3	12.3	5.8	6.8
Total		**-5.3**	**21.2**	**8.1**	**8.6**	**4.9**	**3.6**

CANADA

Value ($ millions)

	2007[r]	2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Computer-Related	6,877	8,009	8,846	8,170	9,049	9,363	9,198
Professional, Scientific and Technical	8,629	9,558	9,984	9,968	9,897	12,010	12,271
Other Services	2,665	2,853	2,643	2,749	3,285	3,732	3,860
Total	**18,171**	**20,420**	**21,473**	**20,887**	**22,231**	**25,105**	**25,329**

% change from previous year

		2008[r]	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Computer-Related		16.5	10.4	-7.6	10.8	3.5	-1.8
Professional, Scientific and Technical		10.8	4.5	-0.2	-0.7	21.4	2.2
Other Services		7.1	-7.4	4.0	19.5	13.6	3.4
Total		**12.4**	**5.2**	**-2.7**	**6.4**	**12.9**	**0.9**

[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 49. DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS BY PROVINCE

Value ($ millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
British Columbia	635.2	686.6	705.1	856.5	868.8	978.7	857.1	872.8	901.8	995.9	1,032.3
Alberta	1,181.7	1,131.6	1,023.6	1,224.2	992.8	885.8	645.7	695.0	684.6	706.8	860.4
Saskatchewan	23.3	23.8	31.1	38.8	20.6	28.9	21.8	20.2	31.7	38.0	28.0
Manitoba	472.8	381.8	435.5	487.5	571.0	550.8	668.8	601.4	602.1	644.3	680.6
Ontario	8,439.5	9,386.0	10,917.6	11,461.0	11,329.6	11,515.0	10,868.7	9,807.4	8,743.1	8,797.7	8,119.6
Quebec	14,269.7	13,217.6	13,605.7	12,462.0	12,946.6	13,083.9	11,916.7	10,540.0	10,710.4	10,629.2	11,974.4
Canada	**25,173.4**	**24,969.2**	**26,882.7**	**26,783.2**	**26,977.0**	**27,287.1**	**25,240.6**	**22,829.3**	**21,925.3**	**22,378.5**	**22,996.3**

% change from previous year

		2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
British Columbia		8.1	2.7	21.5	1.4	12.7	-12.4	1.8	3.3	10.4	3.7
Alberta		-4.2	-9.5	19.6	-18.9	-10.8	-27.1	7.6	-1.5	3.2	21.7
Saskatchewan		1.9	30.7	24.9	-47.0	40.7	-24.7	-7.1	56.9	19.7	-26.4
Manitoba		-19.3	14.1	11.9	17.1	-3.6	21.4	-10.1	0.1	7.0	5.6
Ontario		11.2	16.3	5.0	-1.1	1.6	-5.6	-9.8	-10.9	0.6	-7.7
Quebec		-7.4	2.9	-8.4	3.9	1.1	-8.9	-11.6	1.6	-0.8	12.7
Canada		**-0.8**	**7.7**	**-0.4**	**0.7**	**1.1**	**-7.5**	**-9.6**	**-4.0**	**2.1**	**2.8**

High Technology Share of Total Domestic Exports (%)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
British Columbia	2.2	2.2	2.1	2.6	2.8	3.0	3.4	3.0	2.8	3.2	3.1
Alberta	2.1	1.8	1.3	1.6	1.2	0.8	0.9	0.9	0.7	0.7	0.8
Saskatchewan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Manitoba	5.1	4.1	4.7	4.8	4.7	4.2	6.3	5.9	5.2	5.7	5.4
Ontario	5.0	5.2	6.1	6.5	6.4	7.0	8.7	6.7	5.6	5.4	4.9
Quebec	23.4	20.5	20.3	18.0	19.3	18.9	21.2	18.2	17.2	17.1	18.5
Canada	**7.1**	**6.5**	**6.6**	**6.5**	**6.4**	**6.0**	**7.5**	**6.1**	**5.2**	**5.2**	**5.2**

Note that high technology exports for Canada and the provinces are based on high tech definitions developed for British Columbia. If these definitions were derived specifically for any of those regions, they might differ slightly.
[r] Revised
[p] Preliminary
Source: BC Stats

TABLE 50. IMPORTS OF HIGH TECHNOLOGY GOODS, CANADA AND BRITISH COLUMBIA

	Value ($ millions)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
British Columbia	3,750.7	3,764.1	4,191.7	4,078.2	4,639.3	4,971.9	4,244.0	5,054.0	5,383.5	5,330.6	5,555.1
Canada	**40,492.8**	**43,649.2**	**45,900.1**	**46,680.7**	**50,309.9**	**52,735.8**	**47,902.0**	**51,077.0**	**53,598.4**	**53,045.6**	**56,393.4**
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
British Columbia	0.4	11.4	-2.7	13.8	7.2	-14.6	19.1	6.5	-1.0	4.2	
Canada	**7.8**	**5.2**	**1.7**	**7.8**	**4.8**	**-9.2**	**6.6**	**4.9**	**-1.0**	**6.3**	

Note that high technology exports for Canada are based on high tech definitions developed for British Columbia. If these definitions were derived specifically for Canada, they might differ slightly.

[r] Revised

[p] Preliminary

Source: BC Stats

TABLE 51. UNITED STATES HIGH TECHNOLOGY COMMODITY TRADE

	Value ($US millions)										
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Domestic Exports	151,535.4	166,441.8	177,599.6	209,052.1	226,818.8	223,455.2	192,902.4	207,318.3	213,039.3	226,007.0	237,106.6
Re-Exports	28,251.2	35,012.2	38,006.1	43,517.1	46,624.7	52,362.4	51,826.1	65,992.3	74,682.3	79,003.3	82,682.2
Imports	207,196.2	238,478.3	259,968.7	290,848.0	326,928.8	331,372.0	300,681.0	354,252.9	386,439.0	396,227.8	401,075.8
Balance of Trade	**-27,409.7**	**-37,024.2**	**-44,363.0**	**-38,278.8**	**-53,485.2**	**-55,554.4**	**-55,952.5**	**-80,942.4**	**-98,717.4**	**-91,217.6**	**-81,287.0**
	% change from previous year										
	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]	
Domestic Exports	9.8	6.7	17.7	8.5	-1.5	-13.7	7.5	2.8	6.1	4.9	
Re-Exports	23.9	8.6	14.5	7.1	12.3	-1.0	27.3	13.2	5.8	4.7	
Imports	15.1	9.0	11.9	12.4	1.4	-9.3	17.8	9.1	2.5	1.2	
Balance of Trade	**35.1**	**19.8**	**-13.7**	**39.7**	**3.9**	**0.7**	**44.7**	**22.0**	**-7.6**	**-10.9**	

Source: United States Department of Commerce

TABLE 52. HIGH TECHNOLOGY TRADE COMPARISON: UNITED STATES VS. CANADA AND B.C. (IN CANADIAN $)

	Value ($Cdn millions)										
	2003	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]
Domestic Exports											
United States*	212,303.3	216,587.8	215,145.1	237,137.2	243,613.8	238,446.1	220,204.9	213,561.3	210,750.8	225,863.5	244,252.2
British Columbia	635.2	686.6	705.1	856.5	868.8	978.7	857.1	872.8	901.8	995.9	1,032.3
Canada	25,173.4	24,969.2	26,882.7	26,783.2	26,977.0	27,287.1	25,240.6	22,829.3	21,925.3	22,378.5	22,996.3
Imports											
United States*	290,285.0	310,327.5	314,927.4	329,922.0	351,136.5	353,602.7	343,237.9	364,920.6	382,287.8	395,976.2	413,163.0
British Columbia	3,750.7	3,764.1	4,191.7	4,078.2	4,639.3	4,971.9	4,244.0	5,054.0	5,383.5	5,330.6	5,555.1
Canada	40,492.8	43,649.2	45,900.1	46,680.7	50,309.9	52,735.8	47,902.0	51,077.0	53,598.4	53,045.6	56,393.4
	% change from previous year										
	2004	2005	2006	2007	2008	2009[r]	2010[r]	2011[r]	2012[r]	2013[p]	
Domestic Exports											
United States*	2.0	-0.7	10.2	2.7	-2.1	-7.7	-3.0	-1.3	7.2	8.1	
British Columbia	8.1	2.7	21.5	1.4	12.7	-12.4	1.8	3.3	10.4	3.7	
Canada	-0.8	7.7	-0.4	0.7	1.1	-7.5	-9.6	-4.0	2.1	2.8	
Imports											
United States*	6.9	1.5	4.8	6.4	0.7	-2.9	6.3	4.8	3.6	4.3	
British Columbia	0.4	11.4	-2.7	13.8	7.2	-14.6	19.1	6.5	-1.0	4.2	
Canada	7.8	5.2	1.7	7.8	4.8	-9.2	6.6	4.9	-1.0	6.3	

* Converted from U.S. dollars using an average annual exchange rate.

Source: BC Stats and United States Department of Commerce

TABLE 53. UNITED STATES DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

Value ($US millions)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	2,844.2	3,714.2	4,553.5	5,120.2	7,467.2	9,364.6	12,149.8	11,335.9	9,174.3	9,830.6	10,830.9
Life Sciences	12,026.6	13,218.3	15,042.4	17,121.3	19,547.5	22,353.0	22,468.1	24,298.8	25,611.6	27,455.9	27,765.9
Opto-Electronics	2,121.9	3,055.2	3,838.2	4,303.3	4,768.3	4,175.9	3,403.8	5,145.0	4,911.3	4,072.5	3,828.4
Computers and Telecommunications	39,407.5	42,150.2	44,076.6	46,606.7	49,161.2	48,042.8	37,502.3	39,746.4	42,034.9	42,788.8	42,776.2
Electronics	36,371.9	35,944.7	34,912.0	38,648.8	36,279.0	36,491.9	25,026.8	30,532.5	28,805.6	26,639.7	26,612.8
Computer Integrated Manufacturing	7,651.5	12,302.4	11,092.3	13,810.3	13,623.6	10,293.8	7,314.0	14,034.1	12,503.6	12,391.8	12,912.2
Material Design	981.8	1,055.5	1,056.9	1,274.8	1,531.5	1,703.9	1,479.1	1,857.3	1,832.0	1,864.5	1,694.3
Aerospace	47,333.9	51,862.5	60,528.1	78,597.9	90,011.6	86,973.4	78,940.9	75,730.6	83,716.0	96,695.5	105,699.8
Weapons and Nuclear	2,796.1	3,138.8	2,499.8	3,568.9	4,428.8	4,055.8	4,617.5	4,637.7	4,449.9	4,267.7	4,986.1
Total	**151,535.4**	**166,441.8**	**177,599.6**	**209,052.1**	**226,818.8**	**223,455.2**	**192,902.4**	**207,318.3**	**213,039.3**	**226,007.0**	**237,106.6**
% change from previous year											
		2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology		30.6	22.6	12.4	45.8	25.4	29.7	-6.7	-19.1	7.2	10.2
Life Sciences		9.9	13.8	13.8	14.2	14.4	0.5	8.1	5.4	7.2	1.1
Opto-Electronics		44.0	25.6	12.1	10.8	-12.4	-18.5	51.2	-4.5	-17.1	-6.0
Computers and Telecommunications		7.0	4.6	5.7	5.5	-2.3	-21.9	6.0	5.8	1.8	0.0
Electronics		-1.2	-2.9	10.7	-6.1	0.6	-31.4	22.0	-5.7	-7.5	-0.1
Computer Integrated Manufacturing		60.8	-9.8	24.5	-1.4	-24.4	-28.9	91.9	-10.9	-0.9	4.2
Material Design		7.5	0.1	20.6	20.1	11.3	-13.2	25.6	-1.4	1.8	-9.1
Aerospace		9.6	16.7	29.9	14.5	-3.4	-9.2	-4.1	10.5	15.5	9.3
Weapons and Nuclear		12.3	-20.4	42.8	24.1	-8.4	13.8	0.4	-4.0	-4.1	16.8
Total		**9.8**	**6.7**	**17.7**	**8.5**	**-1.5**	**-13.7**	**7.5**	**2.8**	**6.1**	**4.9**

Source: United States Department of Commerce

TABLE 54. UNITED STATES IMPORTS OF HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

Value ($US millions)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	2,183.9	1,967.4	4,218.8	4,872.6	6,441.6	5,758.3	5,635.0	7,609.7	11,718.1	11,458.0	11,137.6
Life Sciences	30,936.9	32,799.0	30,390.3	33,736.6	36,236.0	39,934.4	38,083.0	41,835.5	45,832.4	44,287.4	43,488.8
Opto-Electronics	5,254.9	7,795.0	12,173.5	19,575.0	24,973.7	25,568.6	23,290.9	25,933.7	26,108.8	26,392.6	22,918.4
Computers and Telecommunications	110,088.5	132,539.0	147,188.5	160,836.8	179,710.6	181,801.8	169,862.5	205,037.7	212,127.4	219,501.4	223,867.7
Electronics	25,135.2	27,454.0	26,594.4	28,009.1	27,033.2	25,644.7	20,900.1	27,706.1	34,038.6	33,874.5	35,948.2
Computer Integrated Manufacturing	6,262.8	7,587.2	8,897.2	10,289.6	10,766.1	10,084.2	6,689.1	9,301.4	14,393.4	13,939.1	12,142.5
Material Design	1,510.5	1,794.4	1,803.8	2,170.8	2,383.7	2,254.5	1,505.2	1,995.5	2,232.0	2,120.7	2,185.1
Aerospace	22,773.1	23,832.8	25,531.4	27,584.3	33,851.3	35,022.4	29,646.3	29,129.3	34,850.1	39,358.8	45,022.6
Weapons and Nuclear	3,050.4	2,709.5	3,170.8	3,773.1	5,532.6	5,303.0	5,068.9	5,704.0	5,138.2	5,295.4	4,364.8
Total	**207,196.2**	**238,478.3**	**259,968.7**	**290,848.0**	**326,928.8**	**331,372.0**	**300,681.0**	**354,252.9**	**386,439.0**	**396,227.8**	**401,075.8**
% change from previous year											
		2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology		-9.9	114.4	15.5	32.2	-10.6	-2.1	35.0	54.0	-2.2	-2.8
Life Sciences		6.0	-7.3	11.0	7.4	10.2	-4.6	9.9	9.6	-3.4	-1.8
Opto-Electronics		48.3	56.2	60.8	27.6	2.4	-8.9	11.3	0.7	1.1	-13.2
Computers and Telecommunications		20.4	11.1	9.3	11.7	1.2	-6.6	20.7	3.5	3.5	2.0
Electronics		9.2	-3.1	5.3	-3.5	-5.1	-18.5	32.6	22.9	-0.5	6.1
Computer Integrated Manufacturing		21.1	17.3	15.6	4.6	-6.3	-33.7	39.1	54.7	-3.2	-12.9
Material Design		18.8	0.5	20.3	9.8	-5.4	-33.2	32.6	11.8	-5.0	3.0
Aerospace		4.7	7.1	8.0	22.7	3.5	-15.4	-1.7	19.6	12.9	14.4
Weapons and Nuclear		-11.2	17.0	19.0	46.6	-4.1	-4.4	12.5	-9.9	3.1	-17.6
Total		**15.1**	**9.0**	**11.9**	**12.4**	**1.4**	**-9.3**	**17.8**	**9.1**	**2.5**	**1.2**

Source: United States Department of Commerce

TABLE 55. UNITED STATES BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS, BY COMMODITY GROUP

Balance ($US millions)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Biotechnology	678.9	1,775.8	373.7	290.5	1,101.9	3,672.8	6,645.5	4,099.6	-2,456.7	-1,514.6	78.3
Life Sciences	-17,934.8	-18,283.1	-13,896.4	-14,980.5	-14,652.8	-14,757.6	-12,815.8	-13,998.0	-16,532.1	-12,717.2	-11,279.6
Opto-Electronics	-2,787.9	-4,288.6	-7,536.7	-14,511.4	-19,506.4	-20,533.2	-18,799.1	-19,731.0	-20,073.0	-21,191.2	-17,809.1
Computers and Telecommunications	-56,960.7	-73,328.9	-83,180.2	-91,595.9	-104,913.2	-104,252.8	-103,184.5	-127,297.5	-122,545.6	-128,073.2	-131,326.3
Electronics	21,462.0	21,110.4	20,949.4	25,406.2	23,510.0	25,154.4	16,366.4	18,355.7	9,328.6	7,339.6	5,860.4
Computer Integrated Manufacturing	2,056.9	5,457.1	2,956.9	4,375.2	3,886.4	1,450.1	1,670.4	6,522.0	-141.7	-1.9	2,363.8
Material Design	-474.0	-657.2	-648.8	-769.7	-718.0	-360.4	213.9	174.1	-55.7	83.3	-109.4
Aerospace	26,659.8	30,544.5	37,206.3	53,632.3	58,823.2	55,221.2	54,316.4	51,934.6	54,349.4	65,727.5	70,209.6
Weapons and Nuclear	-109.8	645.7	-587.0	-125.3	-1,016.3	-1,148.8	-365.6	-1,001.8	-590.7	-870.0	725.4
Total	**-27,409.7**	**-37,024.2**	**-44,363.0**	**-38,278.8**	**-53,485.2**	**-55,554.4**	**-55,952.5**	**-80,942.4**	**-98,717.4**	**-91,217.6**	**-81,287.0**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re exports, whereas *domestic* exports are shipments of goods produced within the United States only.
Source: United States Department of Commerce

TABLE 56. UNITED STATES DOMESTIC EXPORTS OF HIGH TECHNOLOGY GOODS, BY DESTINATION

Value ($US millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Canada	12,218.8	13,446.4	15,020.3	14,509.7	16,168.3	17,040.0	14,381.6	15,412.8	16,568.5	16,044.6	16,181.1
Mexico	7,449.5	8,323.5	7,949.1	9,783.9	9,932.1	10,671.4	8,944.1	10,127.0	10,479.8	12,330.0	14,292.1
European Union	44,729.4	49,719.7	51,201.6	56,798.1	66,724.9	66,496.8	62,265.4	57,016.6	57,309.3	55,719.5	57,574.3
United Kingdom	9,256.4	10,019.4	10,145.3	11,128.4	11,918.1	12,153.2	11,561.8	10,310.5	11,886.0	11,199.5	11,319.6
Germany	8,433.9	8,146.5	9,377.4	11,486.8	14,390.1	15,103.3	15,394.4	14,889.4	11,752.8	11,313.5	10,961.7
France	5,956.8	8,335.2	8,431.3	9,177.5	10,830.9	9,674.5	10,397.7	9,308.0	9,178.0	9,376.1	9,443.7
Ireland	2,960.2	3,321.7	3,715.7	3,489.4	3,902.4	3,589.6	3,110.4	2,470.3	2,209.9	2,059.5	1,333.2
Pacific Rim	69,612.5	74,042.6	76,571.4	90,841.0	91,094.3	83,842.8	66,230.4	83,501.5	82,077.2	86,227.4	92,060.9
Mainland China	7,356.9	8,235.3	10,749.4	15,427.3	17,548.6	15,936.9	14,180.0	17,745.3	16,574.4	17,860.8	23,979.1
Japan	15,569.4	16,373.8	16,103.2	17,792.0	18,057.0	16,227.5	12,456.9	13,482.2	13,742.8	17,026.1	15,437.8
South Korea	8,678.9	9,649.7	10,658.6	13,266.5	11,487.1	9,358.4	7,342.4	10,278.7	10,525.5	11,724.6	10,338.7
Taiwan	7,199.7	8,964.2	9,021.0	9,227.7	10,798.9	8,918.4	5,736.8	8,933.5	7,305.7	6,716.3	7,905.9
Malaysia	7,191.7	6,835.9	6,301.1	7,426.3	5,822.6	6,718.7	4,927.3	6,795.0	6,478.5	5,426.5	5,609.7
All Other Countries	17,525.2	20,909.7	26,857.3	37,119.4	42,899.2	45,404.2	41,081.0	41,260.4	46,604.4	55,685.5	56,998.1
Total Value	**151,535.4**	**166,441.8**	**177,599.6**	**209,052.1**	**226,818.8**	**223,455.2**	**192,902.4**	**207,318.3**	**213,039.3**	**226,007.0**	**237,106.6**

% change from previous year

	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Canada	10.0	11.7	-3.4	11.4	5.4	-15.6	7.2	7.5	-3.2	0.9
Mexico	11.7	-4.5	23.1	1.5	7.4	-16.2	13.2	3.5	17.7	15.9
European Union	11.2	3.0	10.9	17.5	-0.3	-6.4	-8.4	0.5	-2.8	3.3
United Kingdom	8.2	1.3	9.7	7.1	2.0	-4.9	-10.8	15.3	-5.8	1.1
Germany	-3.4	15.1	22.5	25.3	5.0	1.9	-3.3	-21.1	-3.7	-3.1
France	39.9	1.2	8.9	18.0	-10.7	7.5	-10.5	-1.4	2.2	0.7
Ireland	12.2	11.9	-6.1	11.8	-8.0	-13.3	-20.6	-10.5	-6.8	-35.3
Pacific Rim	6.4	3.4	18.6	0.3	-8.0	-21.0	26.1	-1.7	5.1	6.8
Mainland China	11.9	30.5	43.5	13.7	-9.2	-11.0	25.1	-6.6	7.8	34.3
Japan	5.2	-1.7	10.5	1.5	-10.1	-23.2	8.2	1.9	23.9	-9.3
South Korea	11.2	10.5	24.5	-13.4	-18.5	-21.5	40.0	2.4	11.4	-11.8
Taiwan	24.5	0.6	2.2	17.1	-17.4	-35.7	55.7	-18.2	-8.1	17.7
Malaysia	-4.9	-7.8	17.9	-21.6	15.4	-26.7	37.9	-4.7	-16.2	3.4
All Other Countries	19.3	28.4	38.2	15.6	5.8	-9.5	0.4	13.0	19.5	2.4
Total Growth	**9.8**	**6.7**	**17.7**	**8.5**	**-1.5**	**-13.7**	**7.5**	**2.8**	**6.1**	**4.9**

Source: United States Department of Commerce

TABLE 57. UNITED STATES IMPORTS OF HIGH TECHNOLOGY GOODS, BY COUNTRY OF ORIGIN

Value ($US millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Canada	13,722.6	13,844.2	15,806.1	14,949.1	17,801.2	16,628.0	14,262.9	12,863.7	13,531.7	14,091.5	14,294.2
Mexico	17,954.6	22,143.8	23,990.5	30,887.2	38,643.3	40,319.9	39,722.0	48,733.0	47,788.3	49,626.3	47,825.6
European Union	49,557.6	51,394.2	53,714.6	58,701.6	65,574.7	68,951.1	60,220.0	65,603.6	75,526.7	74,111.6	74,375.9
United Kingdom	6,847.1	7,411.5	7,271.4	9,398.9	9,969.7	10,785.9	9,272.6	9,531.6	10,113.3	10,935.2	8,762.5
Germany	8,007.9	9,595.4	11,035.3	11,404.2	11,885.8	11,628.2	10,400.7	10,099.7	12,688.5	13,568.9	14,920.1
France	9,206.0	8,836.6	8,486.6	9,834.5	12,259.4	12,025.6	10,176.7	10,434.5	11,205.8	11,475.7	12,776.0
Ireland	14,573.9	13,433.0	14,046.8	14,225.3	16,043.1	17,698.8	14,451.2	17,505.9	21,701.1	18,912.7	18,459.4
Pacific Rim	115,773.0	140,575.5	154,955.1	174,729.5	192,441.6	191,471.5	171,163.0	209,322.3	228,695.3	235,429.7	241,134.9
Mainland China	29,345.2	45,698.2	59,253.2	72,708.8	88,006.4	91,392.9	89,698.6	115,631.0	129,498.2	141,212.8	145,932.2
Japan	22,386.0	23,876.9	24,590.7	25,839.3	28,117.0	26,720.1	19,869.3	23,314.0	25,617.5	25,081.5	23,381.3
South Korea	14,412.9	17,977.8	13,977.5	13,699.9	14,861.2	16,393.4	15,234.0	17,433.5	17,543.8	13,955.9	15,942.3
Taiwan	12,044.6	12,810.4	12,274.9	14,070.5	14,767.2	13,782.3	12,130.7	15,380.9	18,704.0	15,140.7	14,472.5
Malaysia	16,384.4	18,204.0	22,658.9	25,104.8	22,455.6	20,102.4	14,900.4	15,248.2	14,103.7	14,542.0	16,003.4
All Other Countries	10,188.4	10,520.6	11,502.4	11,580.7	12,467.9	14,001.6	15,313.1	17,730.4	20,897.0	22,968.7	23,445.2
Total Value	**207,196.2**	**238,478.3**	**259,968.7**	**290,848.0**	**326,928.8**	**331,372.0**	**300,681.0**	**354,252.9**	**386,439.0**	**396,227.8**	**401,075.8**

% change from previous year

	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Canada	0.9	14.2	-5.4	19.1	-6.6	-14.2	-9.8	5.2	4.1	1.4
Mexico	23.3	8.3	28.7	25.1	4.3	-1.5	22.7	-1.9	3.8	-3.6
European Union	3.7	4.5	9.3	11.7	5.1	-12.7	8.9	15.1	-1.9	0.4
United Kingdom	8.2	-1.9	29.3	6.1	8.2	-14.0	2.8	6.1	8.1	-19.9
Germany	19.8	15.0	3.3	4.2	-2.2	-10.6	-2.9	25.6	6.9	10.0
France	-4.0	-4.0	15.9	24.7	-1.9	-15.4	2.5	7.4	2.4	11.3
Ireland	-7.8	4.6	1.3	12.8	10.3	-18.3	21.1	24.0	-12.8	-2.4
Pacific Rim	21.4	10.2	12.8	10.1	-0.5	-10.6	22.3	9.3	2.9	2.4
Mainland China	55.7	29.7	22.7	21.0	3.8	-1.9	28.9	12.0	9.0	3.3
Japan	6.7	3.0	5.1	8.8	-5.0	-25.6	17.3	9.9	-2.1	-6.8
South Korea	24.7	-22.3	-2.0	8.5	10.3	-7.1	14.4	0.6	-20.5	14.2
Taiwan	6.4	-4.2	14.6	5.0	-6.7	-12.0	26.8	21.6	-19.1	-4.4
Malaysia	11.1	24.5	10.8	-10.6	-10.5	-25.9	2.3	-7.5	3.1	10.0
All Other Countries	3.3	9.3	0.7	7.7	12.3	9.4	15.8	17.9	9.9	2.1
Total Growth	**15.1**	**9.0**	**11.9**	**12.4**	**1.4**	**-9.3**	**17.8**	**9.1**	**2.5**	**1.2**

Source: United States Department of Commerce

TABLE 58. UNITED STATES BALANCE OF TRADE IN HIGH TECHNOLOGY GOODS, BY COUNTRY

	Balance ($US millions)									
	2003	2004	2005	2006	2007	2008	2009	2010	2011[r]	2012[r]	2013[p]
Canada	4,305.1	6,594.2	7,229.4	8,654.3	8,430.9	10,857.1	9,569.2	15,184.8	17,119.7	15,232.7	15,598.6
Mexico	-4,350.0	-5,635.3	-7,428.2	-12,225.3	-21,407.1	-20,709.5	-19,093.2	-21,489.2	-15,833.6	-16,375.4	-12,228.1
European Union	262.9	4,944.5	4,094.6	5,485.4	9,413.9	6,791.4	9,921.9	565.0	-8,241.2	-7,173.6	-4,970.5
United Kingdom	3,986.7	4,661.8	4,368.5	3,281.3	3,583.5	3,005.7	3,709.0	2,534.6	3,890.5	2,648.2	4,865.9
Germany	1,298.9	-255.2	-356.1	1,561.8	4,568.0	5,519.9	6,467.1	6,490.6	868.7	-383.9	-2,019.6
France	-2,533.7	329.1	756.3	215.4	-467.6	-1,163.1	1,369.9	179.7	-743.4	-217.6	-1,316.3
Ireland	-11,288.1	-9,697.8	-9,846.9	-10,200.0	-11,677.2	-13,675.2	-10,935.1	-14,708.0	-19,216.0	-16,497.3	-16,778.8
Pacific Rim	-37,560.4	-56,576.7	-67,897.1	-71,096.7	-86,693.1	-92,056.2	-90,659.7	-109,335.5	-129,519.3	-129,974.8	-128,268.6
Mainland China	-21,055.1	-36,297.0	-46,932.7	-55,081.6	-67,657.5	-72,660.2	-72,493.3	-94,202.3	-109,312.0	-119,081.9	-116,881.5
Japan	-5,440.9	-5,713.4	-6,814.0	-6,300.2	-8,133.5	-7,979.0	-5,657.7	-7,761.7	-9,859.4	-5,639.9	-5,724.6
South Korea	-4,843.4	-7,636.4	-2,574.1	408.2	-2,446.3	-6,144.7	-7,132.8	-6,398.5	-6,218.0	-1,094.9	-4,379.9
Taiwan	-3,818.7	-2,858.3	-2,270.4	-3,737.4	-2,627.0	-3,685.8	-5,106.0	-4,889.7	-9,875.6	-6,528.4	-4,821.6
Malaysia	-8,578.2	-10,649.2	-15,605.1	-16,584.0	-15,420.4	-12,133.7	-8,694.9	-6,790.6	-6,053.3	-7,477.0	-8,817.2
All Other Countries	9,932.7	13,649.0	19,638.4	30,903.5	36,770.2	39,562.8	34,309.2	34,132.5	37,757.1	47,073.5	48,581.6
Total	**-27,409.7**	**-37,024.2**	**-44,363.0**	**-38,278.8**	**-53,485.2**	**-55,554.4**	**-55,952.5**	**-80,942.4**	**-98,717.4**	**-91,217.6**	**-81,287.0**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within the United States only.
Source: United States Department of Commerce

6. Appendix A: Defining the High Technology Sector

6.1. How was the sector definition derived?

In 1995, BC Stats and the Science and Technology Division of the Ministry of Employment and Investment developed a definition of the high technology sector that focused on standard industries that produce high technology goods and services as their ultimate outputs. The definition looked at the high tech outputs of various standard industries (industries defined in the Canadian Standard Industrial Classification—SIC), their level of research activity, their representation in existing lists of high tech companies and the opinions of an expert panel drawn from government, university and the private sector.[20] The SIC data series has since been discontinued and a new classification system, the North American Industry Classification System (NAICS), has been implemented.

The adoption of NAICS-based industry definitions made it necessary to revisit the definition on which the high tech estimates were based, since many of the industry groupings previously used were no longer available. During 2001, in consultation with industry stakeholders, BC Stats developed a new definition of the high technology sector that was based on the NAICS industry categories. The process of developing the criteria for including or excluding specific industries in the definition was similar to that of the original SIC-based definition as commodity lists, research activities and company lists were once again examined. In addition, since an accepted SIC-based definition was already available, an SIC to NAICS concordance was used as a starting point.[21]

The definition originally chosen (based on theoretical considerations) proved to be only a starting point, as much of the information required to compile high technology statistics was not available at the required level of detail. A working definition, based on availability of data, was adopted in order to prepare the estimates presented in the ***Profile*** report.

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[20] The complete methodology is presented in Lawrance, J. and Miller, S. *Defining the British Columbia High Technology/Knowledge Sector.* (1996). BC Stats, Ministry of Government Services, and Ministry of Employment and Investment, Government of British Columbia.

[21] A more detailed discussion of the methodology is presented in Miller, S. and Adams, S. *Defining the British Columbia High Technology Sector Using NAICS.* (2001). BC Stats, Ministry of Management Services, Government of British Columbia.

In 2005, that definition was expanded further to include various communications technologies. The new industries added to the existing definition were determined through a review of literature pertaining to high technology definitions in use elsewhere, particularly those from the American Electronics Association (whose definition has been widely used by institutions around the world) and Industry Canada.[22] The definition has been further tweaked to incorporate NAICS changes. Every five years NAICS is revised to reflect the emergence of new or expanded industries and often this includes industries in the realm of high technology.

6.2. Are all high tech companies included?

It is recognized that there are some drawbacks to the industry-based definition employed here. The first is that NAICS does not fully recognize industries of the "new economy." As a result, new products and services are often grouped in an industry that primarily produces similar but distinctly different products and services.

Second, it is difficult to capture the full breadth of high technology or knowledge-intensive activity in the economy through NAICS-based definitions. Innovation is not unique to a specific group of industries, but can be found throughout the whole economy. Some firms on the "leading edge" will be missed if they are classified in industries that, in aggregate, fail to show high tech characteristics. On the other hand, it is impossible to remove those firms that lag behind the norm in an industry.

The industries included in the definition adopted for this profile represent the core of the high technology sector. While it is certainly true that examples of creativity and innovation can be found in every industry, this definition, with its industry focus, includes only those industries where high technology activity is concentrated.

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[22] Platzer, M., Novak, C.A. and Kazmierczak, M.F. (February 2003). *Defining the High-Tech Industry.* American Electronics Association.

E. Wayne Clendenning & Associates (May 2000). *Comparison and Reconciliation of SIC and NAICS Industry Codes Used to Define Knowledge-Based Industries (KBIs).* Industry Canada.

6.3. Exactly which industries are included?

The following table lists the industries that are defined, for the purpose of this report, to constitute the high technology sector.

INDUSTRIES IN THE HIGH TECHNOLOGY SECTOR

NAICS	Industry Description
Manufacturing Industries	
325189	Other Inorganic Chemicals
325410	Pharmaceutical and Medicine
333310	Commercial and Service Industry
334110	Computer and Peripheral
334210	Telephone Apparatus
334220	Radio, Television Broadcasting & Wireless Communications Equipment
334290	Other Communications Equipment
334310	Audio and Video Equipment
334410	Semiconductor and Other Electronic Components
334511	Navigational and Guidance Instruments
334512	Measuring, Medical and Controlling Devices
334610	Manufacturing and Reproducing Magnetic and Optical Media
335315	Switchgear and Switchboard, and Relay and Industrial Control Apparatus
335920	Communication and Energy Wire and Cable
335990	All Other Electrical Equipment and Component
336410	Aerospace Products and Parts
339110	Medical Equipment and Supplies
Service Industries	
511211	Software Publishers (Except Video Game Publishers)
511212	Video Game Publishers
512110	Motion Picture and Video Production
512190	Post-Production and Other Motion Picture and Video Industries
515210	Pay and Specialty Television
517111	Wired Telecommunications Carriers (Except Cable)
517112	Cable and Other Program Distribution
517210	Wireless Telecommunications Carriers (Except Satellite)
517410	Satellite Telecommunications
517910	Other Telecommunications
518210	Data Processing, Hosting and Related Services
519130	Internet Publishing and Broadcasting, and Web Search Portals
541330	Engineering
541360	Geophysical Surveying and Mapping Services
541370	Surveying and Mapping (Except Geophysical) Services
541380	Testing Laboratories
541514	Computer Systems Design and Related (Except Video Game Design and Development)
541515	Video Game Design and Development Services
541620	Environmental Consulting
541690	Other Scientific and Technical Consulting
541710	Research and Development in Physical, Engineering and Life Sciences
541720	Research and Development in the Social Sciences and Humanities

Note: For the purposes of this report, the manufacturing NAICS industries are grouped together as "Manufacturing." For services, Engineering (541330) is reported as a separate industry. The other industries are aggregated into groups to maintain confidentiality requirements and still allow for some detailed reporting. Computer and Related Services includes 511211, 511212, 518210, 519130, 541514 and 541515. The remaining 541 NAICS codes are grouped into a category called "Other Services." The 517 NAICS codes and 515210 are covered under a single "Telecommunications and Related" classification and 512110 and 512190 are grouped under "Motion Picture Production and Post-Production."

6.4. High Technology Industries

6.4.1. Manufacturing

325189 Other Inorganic Chemicals

Comprises establishments engaged in the manufacture of high tech inorganic chemicals such as enriched uranium and radioactive isotopes.

325410 Pharmaceuticals and Medicine

Consists of firms engaged in the manufacture of drugs, medicines and related products for human or animal use, including cutting edge products developed through considerable research efforts.

333310 Commercial and Service Industry Machinery

Contains establishments that manufacture machinery for use in commercial and service industries, including high tech optical instruments and photographic equipment.

334110 Computers and Peripheral Equipment

Comprises establishments primarily engaged in the manufacture of computers and peripheral computer equipment such as storage devices, CD-ROM and DVD drives, optical readers and scanners, etc.

334210 Telephone Apparatus

Contains firms that manufacture wired telephone and data communications equipment, including cordless telephones, facsimile equipment, local area network (LAN) equipment, etc.

334220 Radio and Television Broadcasting and Wireless Communications Equipment

Consists of firms primarily engaged in manufacturing radio and television broadcast and wireless communications equipment, including satellites, GPS (global positioning system) and pagers.

334290 Other Communications Equipment

Comprises establishments engaged in the manufacture of other types of communications equipment, such as traffic signals, fire detection and alarm systems, remote control units, intercom systems, etc.

334310 Audio and Visual Equipment

Establishments engaged in manufacturing electronic audio and video equipment such as compact disc and DVD players, televisions, etc.

334410 Semiconductor and Other Electronic Components

Consists of firms engaged in the manufacture of semiconductor devices and other electronic components such as circuit boards, microprocessor chips and other computer parts, fibre-optic connectors, etc.

334511 Navigational and Guidance Instruments

Comprises establishments primarily engaged in navigational and guidance instruments such as air traffic control radar systems, sonar, etc.

334512 Measuring, Medical and Controlling Devices

Establishments engaged mainly in the manufacture of equipment such as high tech medical devices, laboratory analytical and testing instruments, industrial process control instruments, etc.

334610 Manufacturing and Reproducing Magnetic and Optical Media

Contains establishments primarily engaged in manufacturing magnetic and optical media such as compact discs, computer software, etc.

335315 Switchgear and Switchboard, and Relay and Industrial Control Apparatus

Comprises establishments engaged in manufacturing electrical switchgear and protective equipment, including high tech switching devices.

335920 Communication and Energy Wire and Cable

Consists of firms engaged in the manufacture of communications and energy wire and cable such as high tech fibre-optic cable.

335990 All Other Electrical Equipment and Components

Comprises establishments engaged in manufacturing electrical equipment and components, including fuel cells.

336410 Aerospace Products and Parts

Establishments engaged in manufacturing aircraft, missiles, space vehicles, etc.

339110 Medical Equipment and Supplies

Contains firms that manufacture medical equipment and supplies, including high tech laboratory and dental equipment.

6.4.2. Services

511211 Software Publishers (Except Video Game Publishers)

Establishments engaged in producing and distributing computer software, not including video games.

511212 Video Game Publishers

Establishments engaged in producing and distributing video games.

512110 Motion Picture and Video Production

Comprises firms engaged in producing motion pictures, videos, television programs and commercials.

512190 Post-Production and Other Motion Picture and Video Industries

Consists of establishments engaged in providing post-production services and services to the motion picture and video industries, including high tech special effects and animation.

515210 Pay and Specialty Television

Establishments engaged in broadcasting television programs on specialty cable networks, pay television or satellite networks.

517111 Wired Telecommunications Carriers (Except Cable)

Consists of establishments engaged in operating and maintaining network facilities for the transmission of voice, data, text, sound and video.

517112 Cable and Other Program Distribution

Establishments engaged in distributing television and radio programs via cable or satellite distribution systems.

517210 Wireless Telecommunications Carriers (Except Satellite)

Comprises establishments engaged in operating and maintaining switching and transmission facilities to provide direct communications via the airwaves.

517410 Satellite Telecommunications

Contains firms engaged in operating and maintaining satellite telecommunications facilities.

517910 Other Telecommunications

Comprises establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking and telemetry, and radar station operation.

518210 Data Processing, Hosting and Related

Consists of firms engaged in providing hosting or data processing services.

519130 Internet Publishing and Broadcasting and Web Search Portals

Comprises firms primarily engaged in publishing and/or broadcasting content on the Internet, or in operating web search portals.

541330 Engineering

Comprises establishments engaged in engineering activities in design, development and utilization of machines, instruments, systems, etc.

541360 Geophysical Surveying and Mapping Services

Establishments engaged in gathering, interpreting and mapping geophysical data.

541370 Surveying and Mapping (Except Geophysical) Services

Contains firms engaged in providing surveying and mapping services of the surface of the earth, including the sea floor.

541380 Testing Laboratories

Consists of establishments engaged in providing physical, chemical and other analytical testing services.

541514 Computer Systems Design and Related (Except Video Game Design and Development)

Establishments that provide expertise in the field of information technologies through writing and supporting computer software, and computer systems design and maintenance, with the exception of video games.

541515 Video Game Design and Development

Establishments primarily engaged in designing and developing video games without publishing them.

541620 Environmental Consulting

Comprises establishments primarily engaged in providing consulting services on environmental issues, using a staff of scientists, engineers and other technicians.

541690 Other Scientific and Technical Consulting

Consists of firms engaged in providing advice and assistance on scientific and technical issues (other than environmental issues).

541710 and 541720 Scientific Research and Development

Establishments engaged in research and experimental development in areas such as biotechnology, computers, physics, mathematics, etc.

Note that these NAICS codes are based on the 2012 NAICS definition, which includes some changes from the 2007 NAICS, including to some industries in the high technology sector. Specifically, the 2007 NAICS industry 511210 has been split into 511211 and 511212 to break out video game publishers and, similarly, 541510 has been split into 541514 and 541515 to break out video game designers and developers. Some of the data in this report were compiled using information that is still based on the 2007 NAICS; however, given that these new industry classifications sum to the old ones, this will not result in a data break.

7. Appendix B: Defining High Technology Commodities

7.1. Defining high technology commodities

Developing a definitive list of what commodities should be considered high technology is a difficult exercise. Leading technologies are continually evolving and what is considered high technology today may be classified as low tech tomorrow. As a result, the definition of high technology commodities must necessarily change over time. This means that data regarding high technology trade from 2003 may contain commodities that are no longer included in the 2013 definition. However, this does not mean that the data cannot be compared over time. It is still valid to look at growth rates over that period as long as it is clear that the rates represent growth in the changing definition of high technology, rather than a static basket of goods.[23]

The commodity list used by BC Stats to define high technology goods is based on the U.S. Bureau of the Census' advanced technology products (ATP) list.[24] To be considered advanced technology, a commodity code has to meet certain criteria. It must contain products whose technology is from a recognized high technology field, the products must represent the leading edge of that field and they must comprise a significant portion of all goods in the classification code.

The list of American commodity codes from the ATP list was matched against the equivalent Canadian codes. In many cases the codes matched exactly and no further effort needed to be expended. However, in other cases there was not an exact match, particularly for exports, which are coded to only eight digits. For these commodity groups, further analysis was undertaken using available data from the U.S. Bureau of the Census and Statistics Canada to determine whether or not the majority of these codes were high technology (as defined by the ATP list). If it was judged that this was not the

[23] One technical limitation that may cause difficulty in temporal comparisons is when there are changes to the definition of Harmonized System codes. When this occurs, there may be a resulting unintended change to the high technology commodity definition. This is due to the fact that the code may now include or exclude commodities that it did not previously, such that these goods can no longer be separated out (or perhaps can be more finely defined, so that low technology commodities that previously had to be included can now be expunged from the definition). However, these changes are usually small and should not have a significant impact on the data.

[24] For a discussion of the development and content of this list, see: McGuckin, R. H., Abbott, T. A., Herrick, P. and Norfolk, L. (1991). *Measuring Advanced-Technology Products Trade: A New Approach*. U.S. Bureau of the Census.

case, the commodity was excluded from the high tech definition. While this may result in some high technology products being excluded from the definition, it should be balanced to some extent by those commodity classifications that, although they are mainly high technology, still include some low tech goods. Since the ATP list itself is defined using classification codes, this kind of trade-off is already present in the definition. No exact measure of high technology trade is possible to achieve since high technology is subjective to begin with, but this definition should be in line with what most people would agree is high technology.

Note that a commodity need not be produced by one of the industries included in the industry-based high technology definition in order to be considered a high technology product. Some industries not included in the high tech definition, because they mainly manufacture low technology goods, may also manufacture some high technology products. Conversely, it is possible for those industries classified as high technology to also manufacture some products that are considered low tech.

7.2. Calculating B.C. consumed imports

At this time, Statistics Canada does not produce data on imports by province of consumption, rather, only by province of clearance. An estimate of B.C. consumed imports was derived using the consumption of Canadian imports of those commodities by the B.C. economy and applying this ratio to total Canadian imports.

7.3. Data source

Data for trade in goods are supplied by Statistics Canada and the United States Bureau of the Census.

7.4. Commodity groups

The U.S. Bureau of the Census has defined ten fields involving advanced or high technology commodities. Each field represents a large number of products and processes that are considered to be on the leading edge. These fields have been used to classify exports and imports in this report.

Aerospace

Technological developments in this field include advances that allow planes to fly further, faster, higher, to use less fuel and to have quieter engines. Many of the advances have been adapted to military applications, such as vertical take-off aircraft and aircraft that require shorter distances for takeoff and landings.

Biotechnology

Biotechnology covers recent developments in recombinant deoxyribonucleic acid (DNA) research and genetic engineering. Obvious examples include drugs, enzymes and other therapeutic items. Common applications include agricultural production and the use of microorganisms for the production of drugs and other complex molecules.

Computer and Telecommunications

This field covers technological advances affecting both computers and telecommunications hardware products. The primary advances in this field are in developing hardware that can process information more quickly. Important breakthroughs are expected in the areas of artificial intelligence and parallel processing.

Computer Integrated Manufacturing

This field includes developments in robotics and numerically controlled (NC) machines. These products have a significant impact on industrial automation. Robots and NC machines perform increasingly sophisticated operations through developments in sensory and visual capabilities of machines. With these breakthroughs, the manufacturing processes have increased in flexibility and require less human intervention to operate and maintain production machinery. Many of the new automation technologies are made possible because of breakthroughs in the application and development of faster, smaller components.

Electronics

The miniaturization of electronic components is the most important recent technological advance in the field of electronics. Some technologies included are integrated circuits; semiconductors, such as transistors and diodes; and new developments in surface mounting of electronic components, such as capacitors and resistors.

Life Sciences (Medical)

This field encompasses the application of scientific advances to medical sciences. Nuclear resonance imaging, echo cardiographs and total-patient monitoring systems are examples of products developed from recent technological advances in this field. Also, recent increases in the strength of materials and reductions in their weight have led to improved internally-implemented fixation devices and prostheses.

Materials Design

Materials design includes the newest methods of production for products that already exist in the market as well as the development of new products. Recent examples of technological advancements include high temperature superconductors, advanced polymers that expand the areas of plastic use and new ultra-clear glass that allows fibre-optic cable to be used for long distance communication.

Nuclear Technology

This field covers developments in nuclear power production and primary nuclear reactors. It includes newly designed reactor components that improve the safety and efficiency of nuclear power plants. It also includes developments in the creation and packaging of nuclear fuel, and the application of atomic physics to other areas of science.

Opto-Electronics

Opto-electronics is generally defined as the expanded development and application of the laser. Also included are recent advances in photoelectric cells and diodes, photographic and other imaging equipment, and fibre-optic cables.

Weapons

This field covers all advanced methods used for the development, guidance, and control of weapons intended for national or personal protection and deterrence. Many of the developments in this area are the result of breakthroughs in computers and telecommunications as well as aerospace technologies.

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Web: www.bcstats.gov.bc.ca
Twitter: @BCStats
Phone: 250-387-0327
Email: BC.Stats@gov.bc.ca

BC Stats
Box 9410 Stn Prov Govt
Victoria, B.C.
V8V 9V1